Vol 7 **The War Illustrated** N° 170

Edited by Sir John Hammerton

SIXPENCE DECEMBER 24, 1943

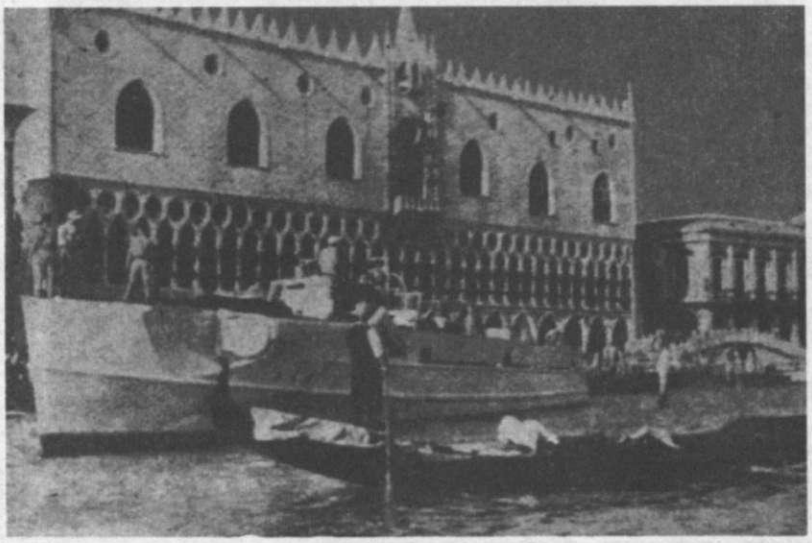
HAPPY WITH MOUNTS AGAIN are these members of a British mechanized cavalry regiment in Italy. Major M. Lindsay, of Fife, Scotland, surveys the landscape during reconnaissance in the Italian mountains, where the horse has come into its own once more in war; standing by is Lieut. J. Richardson, of Northumberland. As our men advance through country normally difficult for mechanized traffic, they commandeer local mules and horses accustomed to this treacherous terrain. *Photo, British Official*

Our Roving Camera Visits Occupied Europe

NORWEGIAN VILLAGERS in the Hardanger area staged this mock funeral march when they obeyed a German order to surrender their wireless sets: a dramatic demonstration that they had preserved their sense of humour under oppression. With a wagon for a hearse, and a fiddler playing melancholy music, the villagers lumped their doomed radios together and fell in behind the "hearse" in the customary style of a funeral cortège. Such sturdy spirit cannot be quenched even by the ruthlessness of Nazi rule.

KANDANOS, VILLAGE IN CRETE, once stood where this board is erected. The inscription records an act of German savagery: "As a reprisal for the foul murder of German soldiers by armed men and women the village of Kandanos was destroyed." Kandanos is but one of 200 villages in Crete and Greece known to have been wiped out since the German occupation, which began in April 1941.

RIGOURS OF THE WARSAW GHETTO in Poland are illustrated by this pathetic queue of Jews seeking water. It was in this ghetto that thousands of Jews were massacred in March-April 1943, following their revolt against appalling conditions imposed on them by the Nazis. Some 1,000 German troops were killed in the riots, and in retaliation the enemy bombed the ghetto and then sent in S.S. and S.A. units backed by strong army formations to restore order among those already mercilessly oppressed.



ON THE MEDITERRANEAN COAST OF FRANCE (above) anti-invasion exercises staged by the Germans prove the enemy's fear that Sardinia and Corsica, now in Allied hands, may be springboards for a sea and air-borne assault on the Riviera. To the east they have entrenched themselves in Northern Italy, and in Venice they have established a base for motor-torpedo boats operating in the upper Adriatic; one is shown (left) in harbour, in St. Mark's Canal. The picturesque building in the background is the famous Doges' Palace.

Photos, Greek Official, Norwegian Official, Planet News, Keystone

THE BATTLE FRONTS

by Maj.-Gen. Sir Charles Gwynn, K.C.B., D.S.O.

THE capture of Kiev by Soviet forces and rapid exploitation of success westwards as far as the lateral railway across the Pripet Marshes produced an extraordinarily tense and interesting situation on the Russian front. The capture of Zhitomir on this railway, although it opened possibilities of a further drive towards the south-west which would cut the German main railway communications between Poland and the Ukraine, marked, however, the limits to which, for the time being, the Russian thrust could safely be carried.

Before a further advance could be made it was essential that the salient that had been created should be widened and consolidated, in view of the certainty that German counter-attacks would soon develop. The tip of the salient was quickly widened by the capture of Korosten and Ovruch, thus making secure the Russian grip on the lateral railway, and the base of the salient was extended on both flanks. The Germans, as was expected, soon commenced a series of counter-attacks, and at first they were directed towards Fastov, near the base of the salient on its southern side. If this attack had met with success it would probably have compelled the Russians to withdraw and abandon most of the ground they had won. But Vatutin had taken precautions, and though the Germans battled fiercely they failed to make progress.

TAKEN by surprise, von Manstein had been unable to assemble a strong enough force, and the most this counter-attack achieved was to prevent a junction between the Russian bridgehead at Kiev with one previously established at Pereyaslavl farther down stream. This may have been a danger that von Manstein feared, but his chief concern must have been for the safety of his communication with Poland. He therefore shifted his counter-attacks farther west against the south-western corner of the Russian salient, where the proximity of his main railways enabled him to concentrate large forces quickly. The urgency of the situation may have forced him to open his counter-offensive in a somewhat piecemeal fashion; nevertheless, relying mainly on his highly mobile armoured troops and motorized infantry, he was able rapidly to stage very formidable attacks.

Although his primary aim was to protect his main railway communications, he probably hoped to inflict a defeat on the Russians which would seriously cripple their offensive plans. But the Russians fought a magnificent defensive battle, in spite of having had little time to consolidate their positions or to develop communications. For about a fortnight the struggle continued with any intensity greater than any since the battle of the Kursk salient. Both sides had immense losses, and as fresh German reserves arrived they were thrown into battle in attempts to break through the Russian defences. Eventually the Russians were forced to give ground, evacuating Zhitomir and Korosten successively. But the defence never lost its cohesion, and this limited success fell far short of fulfilling von Manstein's hopes.

He had, it is true, for the time at least, secured the safety of his communications with Poland, but he had failed to reopen direct lateral communications with the Upper Dnieper and Vitebsk front. Moreover, he had signally failed to disturb the rhythm of the Russian offensive as a whole, and by concentrating such a large proportion of his mobile and armoured reserves for his effort he had weakened his front elsewhere.

UNDETERRED by the critical situation at the head of the salient, the Russians continued to develop their offensive plans. They maintained heavy pressure from their Kremenchug salient southwards towards Nikopol and Krivoi Rog, making steady if slow progress; and northwards, from the base of the salient, they operated towards the lateral railway running through Znamenka and Smyela on which the Germans, still holding the stretch of the middle Dnieper between Kremenchug and Pereyaslavl, depended. They also, by a characteristically bold and ingenious operation, established a bridgehead near Cherkasy, the principal German stronghold on this section of the front, and rapidly initiated operations for the encirclement of that town.

It was, however, to the north of the Kiev salient that the development of the Russian plans was most sensational. From the first, after his breakthrough at Kiev, Vatutin began to widen the base of the salient, driving north-westward up the Pripet River and northwards along the west bank of the Dnieper to link up with the southern flank of Rokossovsky's army which, on the opposite bank of the river, was enveloping Gomel. This enabled the latter to cross the Dnieper and swing northwards, cutting the main communications of Gomel with the west and leaving the defenders of that hedgehog stronghold with only a single avenue of retreat to the north-west. The situation of Gomel, therefore, became more than ever precarious and the capture of Rezhitsa, a subsidiary stronghold on the Dnieper west of Gomel, opened the way for the more complete encirclement of the southern defences of the latter.

But the Germans still clung stubbornly to Gomel, the defences of which were too strong to be carried by assault, and it was not till Rokossovsky, on Nov. 25, opened a new offensive north of Gomel and broke through the German defence line on the river Sozh that a belated decision to evacuate the town was taken, in order to escape another Stalingrad. This fresh blow had taken the Germans completely by surprise, for it was delivered on a front where, by all standards, marshes seemed to make the ground impassable. The defence was overrun and Propoisk, the main stronghold on the Sozh was taken, opening the way to the upper Dnieper and the strongholds of Mogilev, Rogachev and Zhlobin on its banks.

EVENTS now followed in quick succession. On Nov. 26 the evacuation of Gomel was announced. Rearguards left in the city were overcome, and the Russians closed in on the retreating columns, assisted by guerilla parties which had been waiting their chance. How far the retreat was a rout is not yet known, but it certainly was not conducted in good order, and masses of equipment were abandoned. By demolitions and the use of mines direct pursuit was delayed, but meanwhile the Russians carried out enveloping operations north-westwards up the Dnieper towards Zhlobin and up the Beresina towards Bobruisk, as well as westwards to Kalinkovichi and Mozyr on the Pripet.

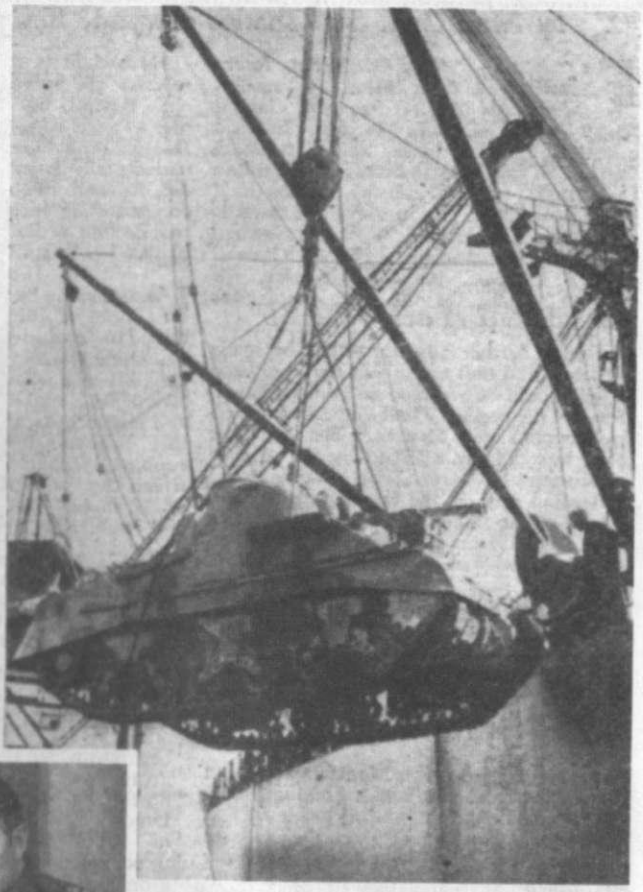
It seems certain that the Germans will fight desperately to hold these places, for they form bastions on the southern flank of the Vitebsk-Mogilev position, which is exposed now that the Russians have turned the line of the upper Dnieper and the Beresina. If, as seems not improbable, the Russians open a major offensive on the Vitebsk front the turning of these river lines would obviously be a factor of great importance in its development; and the capture of Gomel removes the block on the railways and roads required for the communications of an enveloping attack.

It should be noted that the lateral communications across the Pripet Marshes are at present blocked to both sides. The Russians block the line on the south at Ovruch and on the north between Kalinkovichi and Zhlobin; but they cannot use the intermediate line while Kalinkovichi and Mozyr hold out. At the time I write it would seem that von Manstein has fought his troops to a standstill and is bogged down by autumn mud; but it is possible that, with his good communications, he may be able quickly to make good much of the loss of equipment he has suffered. When the ground freezes he may renew his onslaughts and might be able to reopen contact with Mozyr.

The Germans are now in three loosely connected groups, and it seems possible that, rather than await attack in defensive positions, their object will be to draw the Russians into mobile operations.

RUSSIAN FRONT, Dec. 3, 1943. North-west and south-west of Gomel, which fell on Nov. 26, battles were raging for Zhlobin and Mozyr. There was stalemate in the Korosten-Zhitomir sector. A Soviet thrust from Koristovka menaced Kirovograd. *Courtesy of The Times*

New Zealanders Rejoin the Famous 8th in Italy—



VETERANS OF NORTH AFRICA FIGHTING, rested and re-equipped, New Zealanders are again actively on the warpath. On Nov. 30, 1943, it was announced that they had crossed the Mediterranean for the first time since they landed in Greece 2½ years ago, and are now with the 8th Army in Italy. Commanded by Lt.-Gen. Sir B. C. Freyberg, V.C. (5), they are the first battle-experienced infantry to fight in American tanks, one of which (2) is being hoisted on to a transport. They had lunch on the wharf (1) before carrying their kit aboard (3). Shortly afterwards they were marching through Taranto (4), northward bound.

Photos, Sport & General

—And Help Deal 'Colossal Crack' at the Enemy

ACROSS THE SANGRO RIVER, eastern sector of the enemy's intended winter line, Gen. Montgomery, on Nov. 28, 1943, launched his 8th Army, strengthened by fresh New Zealanders (see facing page) and Indian troops, in a large-scale offensive aimed at dealing the Germans what he called "a colossal crack." From forward observation posts, such as this farm building (1), scouts recorded the enemy's dispositions, while a sentry (2) kept watch outside. Men of the Punjab (3) shared in preliminary reconnaissance work. Possession of the heights (4), especially the 1,000-ft.-high Santa Maria ridge, was a primary objective, and it was announced on Nov. 30 that success had been attained.

Photos, British Official: Crown Copyright

THE WAR AT SEA

by **Francis E. McMurtrie**

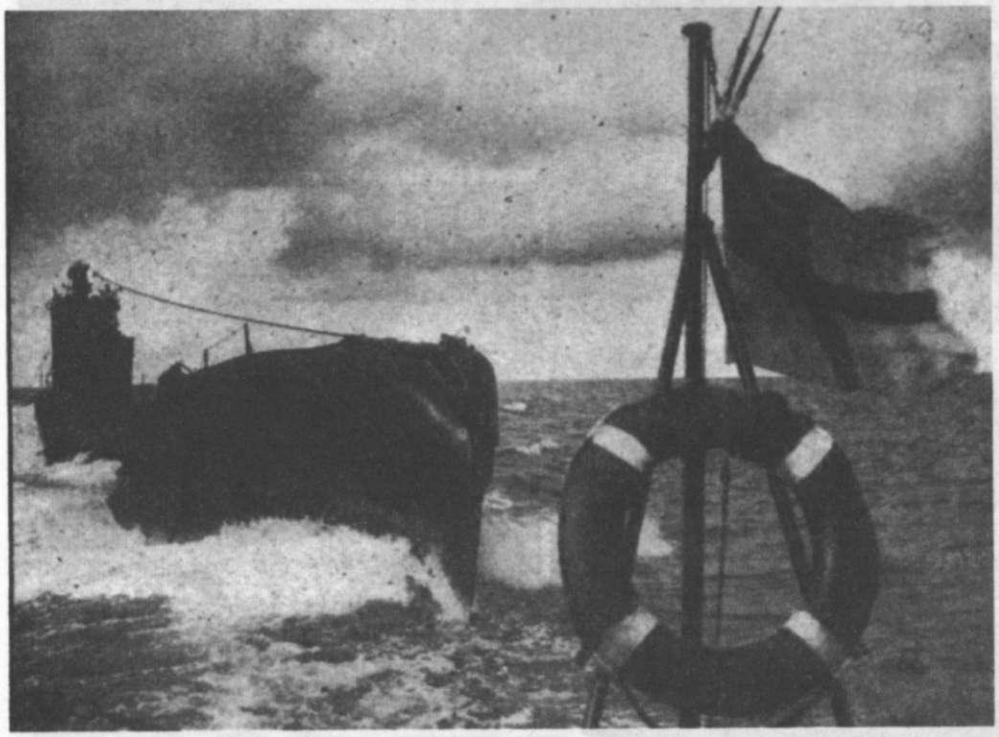
In the intervals between threatening air reprisals at some vague date in the future and trying to persuade the enemy public that U-boats are still sinking shipping in large quantities, the German propaganda machine has recently been making much of an alleged secret weapon, said to be so terrible in its effects that the Allies would willingly call off their bombers rather than have it used against them !

This is rather too transparent an artifice to deceive anyone outside Germany. It must be obvious to most people that if the enemy were in possession of any such weapon as they hint at, no time would be lost in making the utmost use of it. Its non-appearance in action can only mean either that it has no existence or that it has not been brought beyond the experimental stage. In the past several novel weapons have been employed by the Germans. First of them was the magnetic mine, which caused much destruction of shipping until Lieut.-Commander Ouvry dismantled an intact specimen found on the beach at Shoeburyness (see story, p. 124). Once its principle was understood, science very quickly provided an antidote in the shape of the "degaussing" girdle, fitted to all ships passing through waters likely to be mined.

Next, the enemy tried the acoustic mine, detonated by the vibration of a ship's engines, conveyed through the water by the propeller. This was also speedily countered, as were sundry variations of the two types. An acoustic torpedo was another surprise, but it seems to have been overcome in a short time.

Lately a good deal has been heard of the rocket-glider bomb, released from an aeroplane which controls and directs it towards the target by wireless. So far as can be gathered from reports which have appeared, it consists of a bomb with a rocket in the tail, attached to a small glider, the whole apparatus being steered by wireless until it comes into contact with a ship and explodes. The purpose of the rocket is to give it greater acceleration. So far this ingenious device has had nothing like the success of the torpedo discharged from aircraft, or even of the ordinary type of bomb. This is scarcely surprising when it is considered that wireless impulses are capable of deflection by a stronger current from another station. As the missile gets farther from the controlling aircraft, the wireless impulse governing it becomes weaker and can be more easily countered by a stronger one, either from the vessel attacked or from some other ship.

It may be imagined that the Germans are experimenting with various forms of wireless waves in an endeavour to find one that is proof against interference. Possibly they still hope for success, and are boasting on the chance of it. But up to now they have not succeeded in inventing anything which our own scientists have failed to overcome by a counter-device.



H.M. SUBMARINE TAKU, claimed to be the most relentlessly hunted vessel in the Service. Off the Norwegian coast and in the Aegean she has had hairbreadth escapes, on one occasion surviving "a perfect avalanche" of depth charges, and on another having to lie submerged for 36 hours. Oldest man aboard is only 31, and the average age of the crew is believed to be the lowest in the submarine branch of the Royal Navy. Taku is a vessel of 1,090 tons, with a normal complement of 53. *Photo, Planet News*

As a result of the Cairo Conference, the Japanese have been left in no doubt that retribution is coming to them. How, when and where, they are at liberty to guess. Their greatest asset is the geographical situation of Japan, separated by thousands of miles of sea to the south and east from Allied bases. To the westward is the vast mass of China, large tracts of which are occupied by the Japanese armies ; and to the north is neutral Siberia. It has been urged that war in the Pacific is largely a matter of supply. This might equally be said about modern warfare generally, since the nature of its weapons is such as to require abundant renewal of munitions and spares for guns, tanks, aircraft, etc. It would be more correct to say that war in the Pacific is mainly an affair of bases, upon the loss or retention of which the fortunes of the combatants depend.

At the outset of hostilities Japan's first step was to secure the principal bases in the Far East and Western Pacific. One after the other Guam, Hong Kong, Singapore, Surabaya and Manila fell into enemy hands, in the absence of Allied naval forces strong enough to defend them. Pearl Harbour, the principal American base, was rendered temporarily impotent by the lightning air attack of Dec. 7, 1941, that sank or put out of action seven out of the nine battleships then comprising the U.S. Pacific Fleet ; only one at Pearl Harbour escaped serious damage; the ninth was under refit elsewhere.

In addition to the bases occupied in the early months of the war, Japan already possessed the fortified group of islands known as Truk, which in configuration bear a general resemblance to Scapa Flow. This unique harbour was practically presented to Japan when the mandate for the ex-German Caroline group, of which it is a component, was conferred upon her at the end of the last war. It is now believed to be the headquarters of the enemy's main fleet and is thus one of the principal objectives of the Allied forces in the Pacific.

An advanced enemy base now seriously threatened is Rabaul, capital of the large island of New Britain. This and its companion island, New Ireland, are dependencies of New Guinea, an ex-German territory mandated to Australia over 20 years ago. Rabaul is the ultimate goal of the steady advance which has been made through the Solomons since American Marines first landed in Guadalcanal in the summer of 1942. Island after island has fallen to the Allies, until the northernmost, Bougainville (named after the French navigator), has now been invaded. Already Rabaul is under frequent air attack, many ships in its harbour—formerly known as Simpson Haven—having been sunk or damaged. Of late the Japanese have found its use so expensive that they have been diverting their transport to Kavieng, in New Ireland, some distance to the northward. In the New Year the invasion of New Britain itself may be confidently expected.

Simultaneously, Australian troops continue to advance along the coast of New Guinea. Salamaua and Lae, the enemy's advanced bases, fell some time ago, and the Huon peninsula is now nearly cleared of Japanese. Most important of the remaining New Guinea bases is Wewak, which is also being raided more heavily now that Allied airfields are nearer. At sea, the U.S. Pacific Fleet has landed an expedition in the Gilbert Islands, a British group seized by the Japanese early in the war. These islands are believed to have been garrisoned by picked troops, who fought to the last. U.S. Marines landed under heavy fire, and lost, in round figures, 1,100 killed and 2,700 wounded before resistance was overcome. (See account in p. 474.)

After the Gilberts, the next group to be attacked was the Marshall Islands, another ex-German possession for which Japan was given the mandate. Japanese warships, supply ships and aircraft again suffered heavily in this affair. From the Marshalls and from New Ireland, when both are conquered, simultaneous thrusts could be directed at Truk. Increasing inferiority in the air is likely to make it difficult for the Japanese to ascertain from which of these points the attack is likely to come ; nor is it easy to see how, without bringing their main fleet into action, they can effectively repel it.

Americans Blast Japanese From Vella Lavella

DEATH BY NIGHT at Vella Lavella, northernmost island of the New Georgia group in the Central Solomons (see map, p. 474), invaded by U.S. forces on August 15, 1943, and finally evacuated by the Japanese on October 9. During this period of struggle the enemy tried several times to land reinforcements, but Allied air and sea vigilance and strength prevented this. Above, a destroyer hurls fire and metal against Japanese bombers after the ship's speed and manoeuvrability had been affected by engine-room damage.

Photo, Keystone

Brains Behind Our Big Ships' Roaring Guns

No casual rule-of-thumb affair is the gunfire of a British cruiser when she goes into action, all nine 5·5-in. guns belching. The "chain of fire control" is a wondrous thing, as is explained by CAPT. FRANK H. SHAW in this vivid description of the complicated organization of specialists and mechanism that makes astonishingly accurate long-distance shooting possible.

FROM the pregnant moment when the masthead lookout, raking the horizon with powerful binoculars, reports: "Enemy smoke in sight!" the cruiser hums like a hive. "Action stations!" sounds; every man, whether on immediate duty or below at ease, speeds to his station. Although the ship is kept in readiness for instant action, there still remains much to be done. The captain takes the bridge.

His secretary, the Paymaster-Lieutenant, accompanies him; not only to take precise notes of the action, but also to broadcast a running commentary through the cruiser's loud-speakers to the crew, who would otherwise be ignorant of events. Nothing heartens waiting men like knowing what portends.

The masthead lookout reports the position of the suspicious smoke. The range-finding officers and crews instantly apply themselves to their complicated instruments, bringing dual images of the smoke into one, reading the range in thousands of yards. The captain orders course to be altered to close the distance. The ship, quickened to fullest speed, races towards the foe, whose size is not all at once ascertainable. She might be a battleship, a heavy cruiser, or something small. In any case she will certainly be tackled.

THE gunnery officer is in his control, surrounded by instruments to record speed, deflection, atmospheric conditions, quality of light, and a score of other details necessary to the intricate science of gunnery. Down below the engine-room staff are alert; orders may come down at any moment to "make smoke"—a useful screen, in case the enemy is a top-weight. Any moment might bring a high explosive shell of a ton weight crashing into the complicated compartments that make up a cruiser's engine-room. But the Black Squad (the stokers) work on unperturbed; if the sides gape open to admit a greedy sea in Niagara-like torrents, it is just too bad.

Each gun-turret has an officer in charge. Each magazine is controlled by a petty officer. Ammunition-passers are stationed handily. The cruiser is armed with nine 5·5-in. guns, in three turrets. The turret-control officers await the word to describe the type of target; this determines the kind of projectile to be used—armour-piercing, common, shrapnel, or whatever circumstances may dictate.

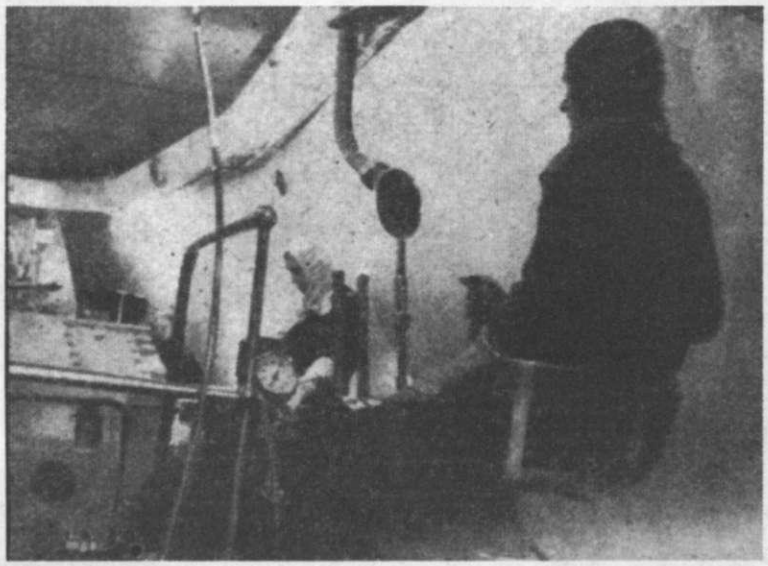
In a room deep in the ship's bowels, below the waterline, is another group of specialists, calculating the effect of present atmospheric conditions on flight of shell and quality of explosion of propelling charges. Weather affects cordite quite a bit. The paymaster beside the captain begins his commentary. Probably the captain inspires it. The lookout, backed now by a second man, scrutinizes the stranger closely.

"Battleship, sir, moving this way!" he reports by telephone.

"Armour-piercing!" dictates the captain to his mouthpiece, who repeats it to the gunnery officer, prefacing the command with: "Bridge to Gunnery officer," so that no false orders can be transmitted. Gunnery control speaks to turrets: armour-piercing shell comes up from the deep magazines. Breech-blocks clash open, and from the trough into which each heavy shell is placed that shell slides into the barrel of the gun, with the quick punch of a mechanical ram to seat it firmly and engage the driving band in the rifling. The bags of cordite follow, the breech slams shut, the priming tubes are inserted by the gun-captain, who wears a belt full of them.

"No. 1 gun ready! No. 2 gun ready!" Each gun-captain reports to the turret officer who reports to gunnery-control who reports to Bridge—that is, the captain. And it is the captain's responsibility as to whether he shall fight his ship against overwhelming odds.

This captain elects to fight. If he can close the range his lighter guns might well prove a match for the heavy stuff carried by the enemy. He speaks to gunnery-control. "Open fire when in range!" he orders. The range-finders double their intent observations. They know the extreme range of the 5·5s, know that at that range the shell will fall more vertically than horizontally. The gunnery officer hears their chanted alterations and mentally applies them to his problem. He wants to be sure of hitting quickly; the stunning effect of a correct broadside ought to be enough to disorganize completely the enemy's controls and morale.



IN THE AFTER 14-in. GUN TURRET of H.M.S. King George V during a practice shoot. Nearest man is at the controls of the shell hoist from the magazine. Communications "number" is seen in the background, receiving directions from the gunnery control points. *Photo, British Official: Crown Copyright*

THEREFORE it is advisable to put a different range on each gun, so that when all are fired, simultaneously, one shot at least will hit. This is known as laddering; and it means that each gun must have its own observer, who, calculating the time of flight of the shell at specified range, can identify his own splash. Quick comparison by the spotters finds the precise range. Half the shells might overshoot, half might undershoot, but so long as one hits—and a dull red flash instead of a high white splash indicates a hit—an accurate range is found.

There are countless calculations. The two ships are steering different courses, probably at an angle to each other; deflection to right or left must be compensated. An appreciable number of seconds passes between a gun being fired and its projectile reaching a destination; during that interval the target ship must have altered her position. There are the comparative speeds of the two ships, too, to be taken into account. But the complicated organization below the waterline takes care of all such details; automatic calculators subtract, multiply and divide. And the result—the precise range to be put on the sight—is transmitted to the controls.

"Twelve thousand—closing!" instructs the gunnery officer.

"Twelve thousand, closing—set!" is reported by the sight-setters. There is a buzzing scream overhead, another, another. Three huge white splashes climb from the sea astern the cruiser. But before the water foams, the masthead lookout, eyes glued on the enemy, has seen the flashes and reported: "Enemy opening fire!" The secretary transmits this to all action stations, adding his own comments—usually jocular. The fire and wrecking parties stand by, knowing that the next instant may bring them into brisk action—or leave them splashed in death along the steel decks.

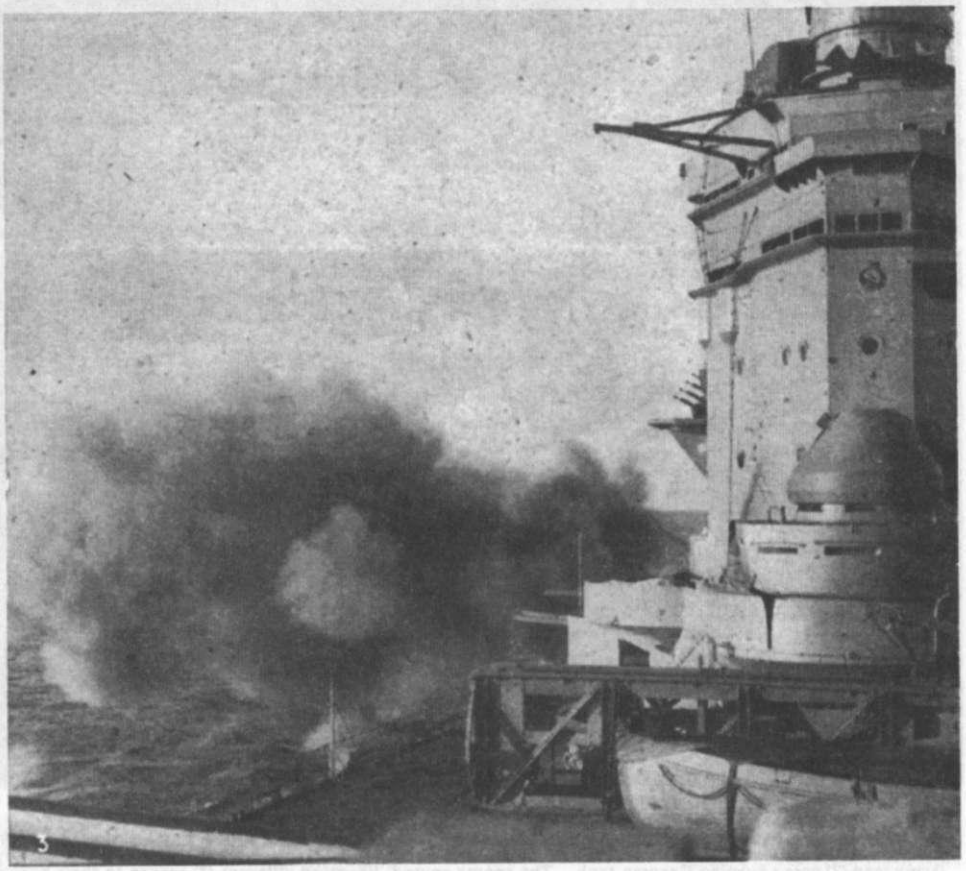
"MAKE smoke!" says the captain. In the boiler-rooms the leading stokers make precise adjustments to the burners, so that too much oil mingles with the compressed air; instantly the funnels pour out a mighty cloud which, drooping to the water, rising to hide the masts, forms an effective screen. There is no longer a point of aim for the enemy gunners. But the cruiser's gunner has already selected one on *his* target. "Conning tower and waterline" has been his order. That means the guns train on an imaginary point where two lines would intersect.

The captain takes the microphone. His ship is smeared everywhere in thick, oily smoke that fouls everything. Down below is even worse than on deck, as the intakes of the ventilating gear draw in the thick, choking stuff. "I'm leaving the screen on a course of seventy!" he states. Then, suddenly: "Stop making smoke!" The cloud diminishes, vanishes.

"You may open fire!" says the captain, quietly. A cascade of enemy shell falls far wide of the cruiser; the smoke-cloud has baffled the enemy gunners. "All guns—fire!" says the gunnery officer. The ship leaps as if torpedoed. Nine flame-tongues lick out; the spotters can see the projectiles climbing on a high trajectory and then vanish.

"Splash! Splash! Splash!" Each turret gunner watches for his own timed splash. So does the gunnery officer. "Hit at eleven thousand five hundred, sir!" he reports. "Go into rapid independent, please!" says the captain. And three times each minute the nine guns belch, recoil, run out to be reloaded. Action is definitely joined. The chain of fire control has worked without the suspicion of a hitch.

Far Over the Sea the Shells Go Screaming



BIG GUNS of our fighting ships form the pivotal feature of the ship's construction ; they are the supreme consideration. And in time of war life in the Royal Navy afloat is dictated by the necessity of keeping the great weapons ready for instant battle. Aboard the 31,100-ton battleship H.M.S. Malaya (1) the crew of a 6-in. gun battery are in action ; note their protective anti-flash headgear and gauntlets. A gunnery officer aboard a cruiser (2) telephones orders during an action in which a convoy was pursued from the Bay of Biscay to the open Atlantic by U-boats and Focke-Wulf bombers. H.M.S. Rodney fires her secondary armament of 6-in. guns (3). Note main fire control tower top right. Rodney's displacement is 33,900 tons. See also facing page.

Photos, British Official ; Crown Copyright ; Fox

Soviet Sequence: Enacted Countless Times

ON THE EASTERN FRONT at the beginning of December 1943 fighting raged most fiercely in three river sectors: in the Lower Dnieper zone, where the Soviets were beleaguering Cherkasy; in the Upper Dnieper-Sozh area, where Zhlobin was menaced; and in the Lower Pripet, where the rail junction of Mozyr was the Russian objective. (See map p. 451.) Machine-gun carts (1) escorted by cavalry move up to the front. Battle joined, Red Army men (2) pass a burning German tank. The enemy routed, liberated villagers (3) return to their homes. *Planet News, New York Times Photos*

Guerillas Hamper German Efforts West of Kiev

INTO THE WESTERN UKRAINE swept the Red Army after the fall of Kiev on Nov. 6, 1943 : Soviet tanks (1) are shown passing through a Ukrainian village. Enemy resistance—symbolized by this knocked-out tank (2)—stiffened on the Korosten-Zhitomir line (see map, p. 451). Brilliant commander on the Ukrainian front during the retreat of 1941, Marshal Budenny (3—left) revisited the battle area recently : he is seen with Lt.-Gen. Batov. Guerillas, first organized by Budenny, harass the enemy by sowing minefields in their path ; German sappers (4) are kept busy maintaining a constant and vigilant search to clear them.

Photos, Pictorial Press, Planet News

Tough 'Recces' Race Ahead As We Invade

One of Britain's newest and most formidable units is the Reconnaissance Corps. For reasons given here by JOHN ALLEN GRAYDON, these eyes of the Army, the "Recces," whose battalions—one to each infantry division—have a scale of armaments and a degree of mechanization unprecedented, are considered the world's finest exponents of open warfare today.

A TERRIFIC punch is packed by each battalion of the Reconnaissance Corps. Each has some 250 mechanized vehicles, including Bren-carriers, armoured cars with high road-speed, troop-carrying trucks, and motor-cycles. Armament includes anti-tank artillery and grenades, also batteries of mortars, and a high proportion of tommy-guns and light machine-guns.

The Recces were prominent in the Sicilian campaign. For reasons of security the full story of their exploits cannot be placed on record at this stage of the war, but by forging ahead of the main forces they were able to secure vital information which played a big part in the moulding of our plans for such a lightning capture of that Mediterranean island.

Since they arrived in the Middle East theatre and took part in the termination of the North African campaign, fighting with the First Army, the Recces have rarely ceased to be in the forefront of our land forces.

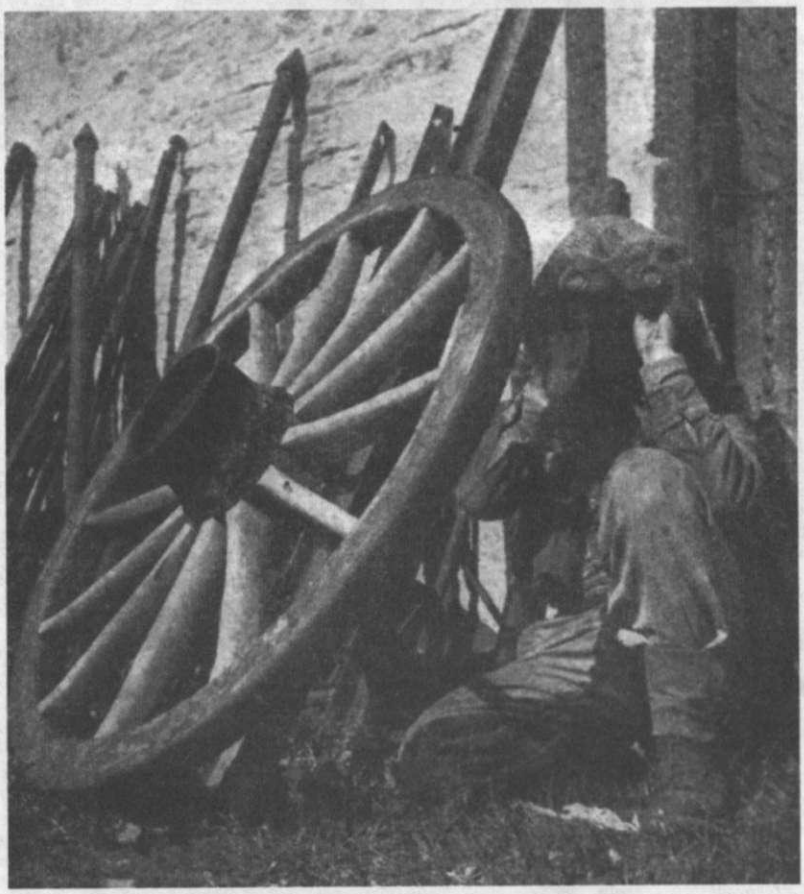
They were the first men of General Anderson's army to meet the Germans, and, although heavily outnumbered and outgunned, caused the enemy a great deal of trouble. Later, in the winter of 1942-3, they gained their initial fame by being the first British troops to enter, and hold, Goubellat, Pont du Fahs, Bou Arada, El Aroussa, Zaghouan, Enfidaville, and Depienne. One sergeant, who earned the D.C.M. during this great series of attacks, said, "And we even poked our cocky faces into Cheylus and Bir Meherga!"

THE first month of the Recces in action will live for ever in the annals of the Corps, for great feats of arms were so frequent that they became commonplace. For instance, on December 4, 1942, when headquarters were at Medjez el Bab, the order came to Sloughia to extricate the personnel of a parachute battalion who had been landed to raid the enemy airfield at Oudna, and had afterwards fought their way back across the hills. The entry in the War Diary runs:

"11.50 hours. Enemy contacted Ksar-Tyr area. In action all day, but not much success against heavier armour. 150 personnel of Para. Bn. found west of Medjez and 37 extricated from operational area . . . 5th Sweep with U.S. Recce Coy. to Ksar-Tyr area drew blank. Three Mark IVs and three 8-wheeled armoured cars seen by B squadron on south, enemy making for Pont du Fahs. 18 parachutists of Para Bn. collected during the day . . . 6th B. and C squadrons with supporting arms contact enemy near Bir Meherga. Mortar troops fired 68 bombs over farm where German armoured cars were lying. Germans appeared vastly annoyed . . . 7th C squadron dive-bombed by Ju88s, lost 4 armoured cars, 1 carrier; truck damaged near Goubellat."

Three days later the rains came; and undaunted, but very tired, exulting but inevitably limping from loss of men and material after nearly a month of incessant adventures in no man's land, the regiment was taken back to refit and to rest awhile before going out to the front again.

The Recces, whose prime task is to find out the enemy's secrets, more often than not have to fight for the information they seek. Sometimes they operate miles behind their opponents' front line. It should be stressed that this Corps includes in its ranks some of the most intelligent, and toughest, men in the British Army. The job for which they have all volunteered calls for quick thinking, initiative, and daring. With these facts in mind one is not surprised to find that the "Mobile Commandos," as they have been so often called, include many schoolmasters and journalists.



EYES OF THE ARMY are the men of the Reconnaissance Corps, whose work is described in this page. Here one of them, skilfully camouflaged against the light and shade of a rickyard background, scans the country for sign of enemy movement. *Photo, Keystone*

RADIO is the life-blood of the Recces as they operate so far from their headquarters, and their signallers, after three months of training, can master three different types of wireless set. Every man, before "passing out," must be able to transmit on the Morse buzzer 12-15 words a minute. Often, too, they pick up information being sent by British planes many miles away. There have been instances of Recce units acting on information received in this manner and causing the enemy severe casualties. Among their other duties, they have to discover where anti-tank guns are placed, locate and map-out strong points, and take care to find where Axis minefields have been sown.

THE crews of the numerous vehicles used by the Recces are first-class engineers and map-readers, and possess a knowledge of field engineering and demolition. Lately mine-clearing has also been included in their training; and their achievements reveal that they are indeed proving wonderfully adept at every form of tactical warfare.

Already these men have shown that they are able to deal with enemy aircraft that might attempt to interfere with them while at work. Just before the Tunisian collapse a German fighter attempted to shoot-up an armoured car belonging to the Reconnaissance Corps. The gunner, holding his fire until he felt certain of a "kill," shot down the machine, and its crew of two were taken prisoner by the Recces.

Even when in training the men are encouraged to show their initiative. During one important exercise a carrier driver discovered his fan belt was broken. He pulled off his braces and made a temporary belt for the carrier. This enabled him to reach base. Later he received a new pair of braces—and the hearty congratulations of his commanding officer!

THE assault infantry, who speed ahead of the main forces in their tough little trucks, are the real Commandos of the Recces. As brave as lions, these troops, before being sent to line units, are given a rigorous course. Part of their training includes fending for themselves—"living on the land"—for two days and nights. And this appears to have stood them in good stead. For these men, in the course of their ever-dangerous work, have been known to leave base and not return for over a week! These specialist soldiers, who combine brain with brawn, are among the élite of the British Army. No matter where an Allied army may be advancing, the Recces race ahead of the leading troops, probing and fighting for details of the enemy's strength, gun positions, intentions.

This Corps, whose chief function is fighting for information, accomplished three other major tasks during the Tunisian campaign: it gave protection to the main flank of our forces; actually took and held ground required for the advance of our divisions; and maintained constant and far-reaching patrols to give adequate warning of any enemy advance. The Corps also captured many German parachute troops in Tunisia. The Army has learned to admire and rely on the superb work of the Recces.

Mobile Commandos of the Reconnaissance Corps

'OUR PATROLS have been active.' Behind the familiar, terse announcement in the official communiqués lies unceasing work of men of the Army's Reconnaissance Corps, one of the most important units in our military organization. Men of the Corps, popularly known as Recces, are not only skilled in their own field, but are as tough as Commandos. (See facing page.)

A party of Recces cross a river in rubber boats (1), their Bren gunners at the ready. Bren-gun protection is also afforded to this armoured car commander (2) out on patrol. Men of the Recce Regiments have distinguished themselves in North Africa, Sicily and Italy. Indeed, first men of the 8th Army in Italy to reach the bank of the Sangro were Recces; two are seen at practice, in the Sangro area, with a two-inch mortar (3).

In Tunisia, Recces sometimes probed as much as 40 miles ahead of our main forces; having dispersed a small centre of opposition, Bren-carriers (4) pursue the retreating survivors.

Photos, British Official: Crown Copyright; Keystone

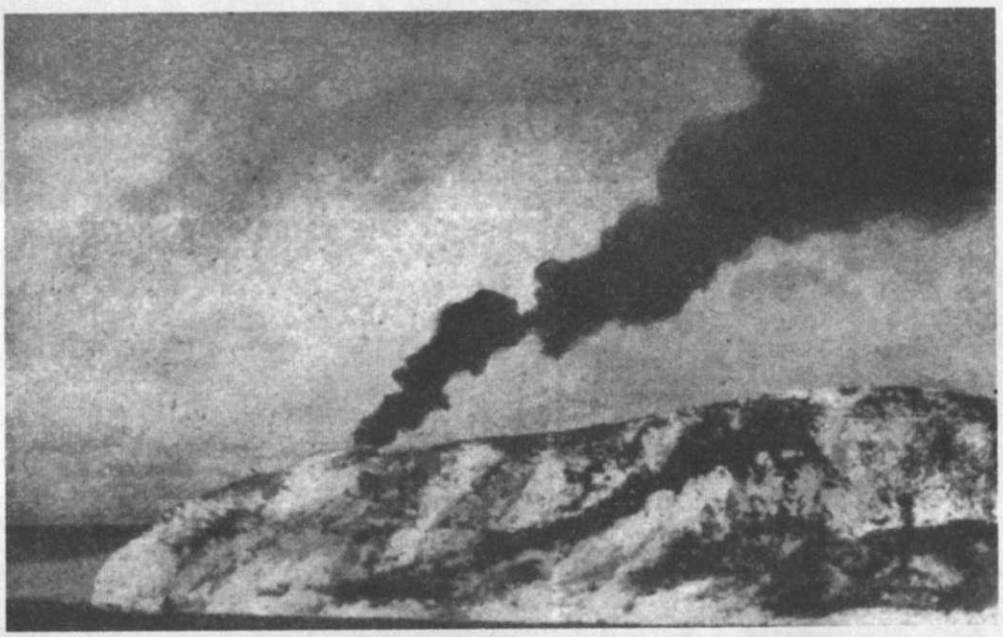
Frontiers of the Future: More Balkan Problems!

As Allied control of the Adriatic makes increasingly possible an assault from the west on enemy power in the Balkans, and the Russians sweep on from the east, attention is here focused by HENRY BAERLEIN on the knotty problems of frontier adjustments in this stormy corner of Europe. These vexed questions will have a prominent place on the peace conference agenda.

ONE does not envy the statesmen whose task it will be to settle the frontiers of Central and South-eastern Europe after the war. So many considerations will have to be taken into account, and if any super-Solomons are available for the job they will inevitably be torn between perfect justice to all and preference to those whose copybook has come unblotted out of these strenuous years.

Yet, in order to avoid that simmering discontent in the new and better world we hope to build up, there must be a sincere effort to deal as fairly as possible with such countries as Bulgaria, Hungary and Rumania, despite the fact that, in comparison with Czechoslovakia, Yugoslavia and Greece, they deserve so little.

Of course, it will not be possible to prevent the presence of minorities in every country.



ADRIATIC COASTAL RADIO STATION in enemy-held Albania squarely hit by R.A.F. Spitfires of N.W. African Coastal Air Force, guided to the target by a Marauder from which this photograph was taken. Formerly a Turkish dependency, Albania became an independent state in 1912, suffered the ravages of war 1914-18, was reorganized by King Zogu in 1925, and annexed by Italy in April 1939. Proudly jealous of her freedom and independence, Albania is of great strategic importance in the Balkans and Adriatic. *Photo, British Official*

The remedy of transplanting populations cannot be applied in all cases. For example, in the east of Transylvania, a predominantly Rumanian province, there is a solid Hungarian block which has been settled there for centuries. Even if similar soil were to be had elsewhere, these people would be very reluctant to be moved, but fortunately they—at any rate, the large peasant majority—were well content under the Rumanian regime, with its Agrarian Reform, which was scarcely introduced into Hungary. There will be no question, therefore, of transplanting these "Szeklers," and in Transylvania, restored to Rumania, there will probably only have to be slight rectifications in the west.

IT is obvious that the territories overrun by the Hungarians with the acquiescence of Hitler will have to be abandoned. They have not the remotest right to Ruthenia, the most easterly part of Czechoslovakia, which is inhabited by the smallest group of the Slav peoples. It is true that this region was under the Hungarians for many centuries, during which they entirely neglected it. One of their officials departed from Užhorod, the Ruthenian capital, at the beginning of the last war. When he returned with the Hungarian army in 1939, and saw what tremendous improvements had been brought about by the Czechs, he exclaimed that they should be asked to administer the whole of Hungary for twenty years!

Just as little right have the Hungarians to most of Slovakia, though it may be that various frontier rectifications can be made; and no doubt the Czech statesmen will be more disposed to agree to this if a more democratic regime is installed in Budapest. There was a violent contrast between the powers enjoyed by Hungarian electors and deputies in Czechoslovakia and those of the Slovaks in Hungary. As an example of Czech tolerance there is Ruthenia, where five-sixths of the provincial income was expended on schools, and the State supported more Hungarian schools than in former years had been supported by the Hungarians themselves.

In the north of Czechoslovakia are the so-called Sudeten Germans, who, so Hitler used to scream, were horribly maltreated by the barbarous Czechs. The truth is that those who voted for the Reich were very soon disillusioned and, in the vast majority, they will welcome with open arms the return of the Czechs. Naturally, every case must be judged on its merits, and those whose conduct during the war has been inimical to Czechoslovakia must be asked to depart. Generally speaking, it looks as if the old frontier of Bohemia will be restored—it was such an excellent one that the German army would have found it a hard nut to crack if the Czechs had been allowed to fight.

Yugoslavia should see herself augmented in the north-west, because it is admitted by every righteous person that the Slovenes who languished for more than twenty years under Italy will have to be reunited to their brethren. Fortunately, there is in that region a river which marks the boundary between Italians and Slavs, very few of the latter living to the west and equally few of the former to the east of it.

Fiume, of course, must be allocated to Yugoslavia, the whole of its hinterland being Slav; while the absurdity of leaving Zara to the Italians must not be repeated, though I saw the other day that an M.P. advocated that, after being demilitarized, it should remain Italian. I do not know whether this gentleman has visited Zara, where the Allies in 1919 found Italian being spoken—for the simple reason that Austria-Hungary established various languages as the official ones in various provinces.

ZARA was an enclave in Yugoslavia with not even its own water supply, so that in the event of a siege it would have had to fall back on the local maraschino. The population fell from 35,000 to about 7,000, and the harbour was so empty between the two wars that when Mussolini sent a crane to be set up, the people said that in the absence of merchandise to be raised from the ships it had presumably been sent to raise Zara's morale.

The Dalmatian islands have a Yugoslav majority of about 98 or 99 per cent, and not one of them should be allotted to Italy. Sagacious Italians, such as Professor Salvemini, put forward this opinion, and were for that reason sent by Mussolini to the Lipari Islands; former Italian convict settlement. Farther down the Adriatic is Albania, whose frontier with Yugoslavia is satisfactory to both parties; that with Greece is open to discussion.

But it will be no acrimonious discussion if the Albanians continue the good work of cooperation with Greek guerillas on which they are now embarked. At Debar, to the north of Lake Ochrida, they have successfully joined forces with the Yugoslavs against the Germans, while in the Valona area the guerillas have driven the enemy from Drashovica into the hills. So far, efforts at quelling the uprising have been unsuccessful, though the Germans have sent two fresh divisions into the country.

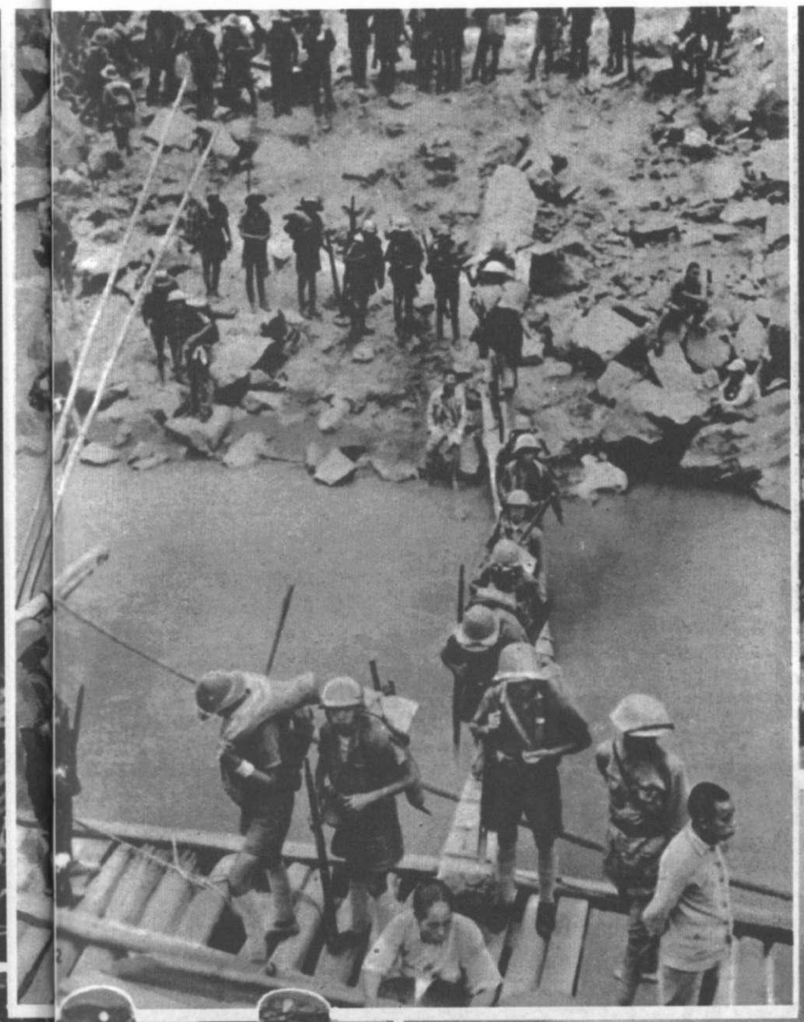
IN Albania, as elsewhere, there have been quislings, and now it has been demonstrated in that country how such scoundrels should be treated; in Tirana, the capital, where sabotage is less easy than in the mountains, Mustafa Kruja, a former puppet premier, was attacked and wounded, his son and his chauffeur being killed. The more Albanians resist those who have invaded their country, the more amicable will they find the Greeks in the delimitation of the frontier.

As for Bulgaria, the ideal solution would be for her to remember that she is a Yugoslav land and ask for union with Yugoslavia. This would be well received by Slovenes and Croats, as well as by Serbs. And it would at last bring peace to Macedonia, that province inhabited by Slavs who, mostly, do not know whether they are Bulgars or Serbs. For both countries have claimed them, and have not always used very gentle means in their proselytizing efforts.

Photo, Muir

Fighting Leader of China's 450,000,000

For more than thirty years a power behind China's struggle for unity and freedom, and Generalissimo since Japan declared war on his country in July 1937, Chiang Kai-shek became President of the Chinese Republic on Oct. 10, 1943—thirty-second anniversary of the Revolution, in which he played a conspicuous part in the overthrow of the Manchu dynasty. On Nov. 22, 1943, he met Churchill and Roosevelt in North Africa to plan the final overthrow of Japan. See also p. 476.



Building a New Allied Lifeline to China—

Along the Salween River, on the Burma-Yunnan border, and in the Hupeh-Hunan region north and south of the middle Yangtze-Kiang, fighting is fiercest in this seventh year of China's war. Vital to these campaigns is the new Ledo Road under construction from Assam into Northern Burma, there to link with the Burma Road supply-line denied to her since the Japanese invasion. (1) Chinese troops shore-up with logs a river bank alongside which the new road must run.

Photos, Associated Press, Keystone, Planet News

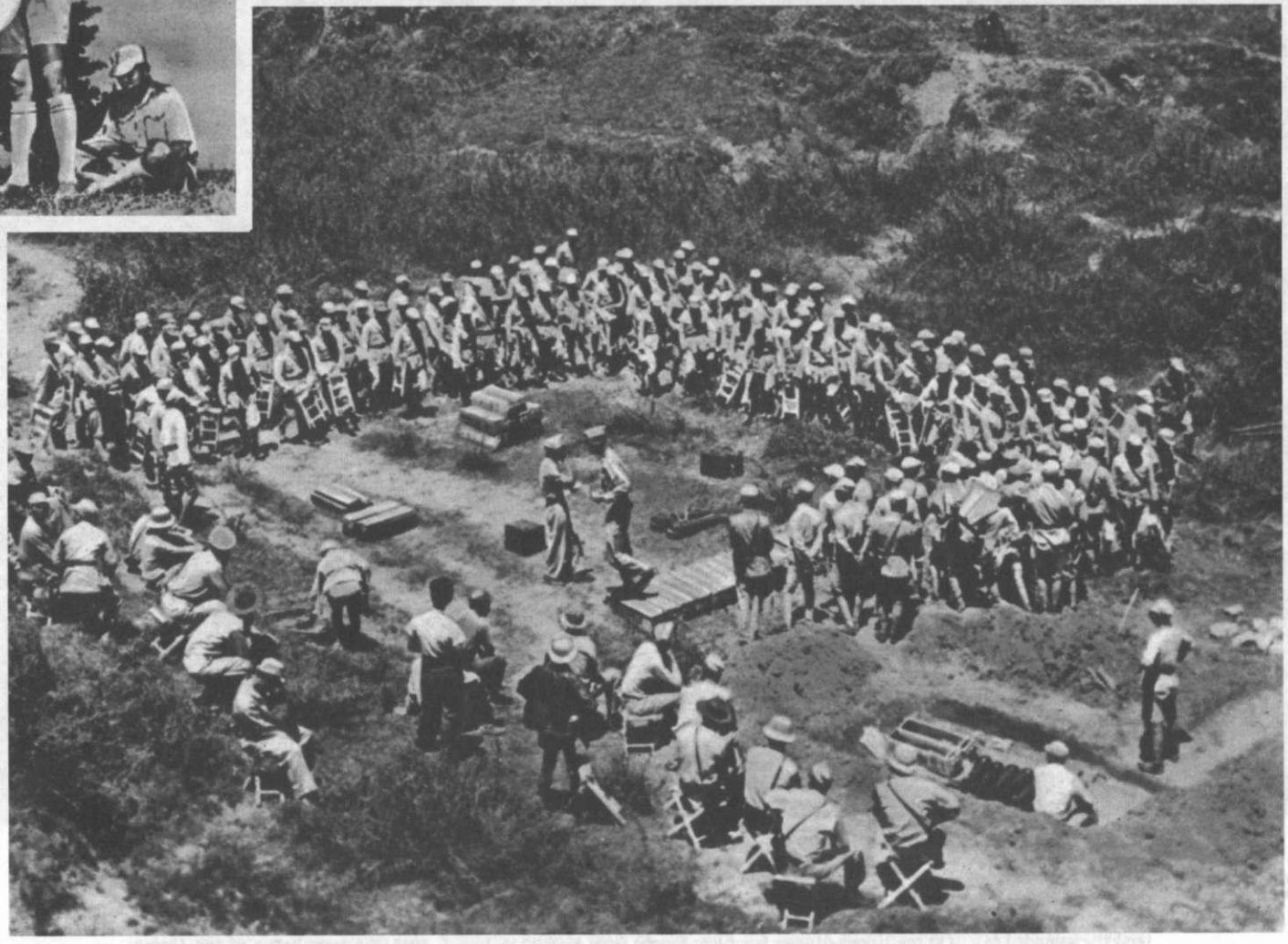
—While On Two Fronts the Battles Rage

China's " back door " is the Salween front, where commanders (4) plan destruction of the enemy in jungle country in which the wearing of hoods (3) as protection against malaria-carrying mosquitoes is imperative. Close behind the line nurses tend the wounded (5). On the Hupeh-Hunan front was fought from May 25 to June 6, 1943, the great battle of the Upper Yangtze-Kiang, in defence of the gateway to Chungking, the wartime capital ; troops (2) move up to the fighting-line.

How America Is Helping China's Army

Photos, Keystone, Pictorial Press

Under Lt.-Gen. J. W. Stilwell, C.-in-C. of U.S. Forces in China, Burma and India, schools have been established for training Chinese troops in modern offensive warfare; signalling with flags (left), and a mortar demonstration (below). Chinese soldiers (above) cheerfully haul a heavy roller consolidating a new airfield runway, whilst a bomber of the American China Air Task Force prepares to take off.



VIEWS & REVIEWS

Of Vital War Books

by Hamilton Fyfe

Portugal and Her Peasant Premier

WHEN I think of Spain I think of bare mountains, brown soil, parched crops, treeless plains, the sun a tyrant rather than a friend. Not that Spain is all like that. The south is better, greener, less harsh. But in general the Spanish landscape is repellent because it is arid, burned up.

Portugal, now so often in the news, is strangely different—I say "strangely" because you wouldn't think two countries lying together on one peninsula could be so unlike. The smaller one has been called, says Col. F. C. C. Egerton in his biography, Salazar, Rebuilder of Portugal (Hodder and Stoughton, 15s.), "the garden of Europe." Why this contrast? Because the west winds, bringing rainclouds across the Atlantic, strike the mountains of Portugal and drop abundant moisture. The soil is fertile, the air humid, everything grows in profusion. Those winds stop when they have performed this service for the Portuguese. Spain across the frontier is left dry.

Yet cultivation is not so easy as you might suppose. In some districts irrigation is necessary to produce good crops. And the peasant holdings of land are many of them so tiny that it is impossible to get out of them enough for a family to live on. The father must go to work for someone with a bigger farm, and he gets very small wages, a shilling to one-and-threepence a day.

"THE standard of living is extremely low," says Col. Egerton, "and the percentage of illiteracy is extremely high. Only one person in five can read and write. Fifteen hours is the peasant's usual working day. They live on bread, dried peas, figs, and, as an occasional treat, a little dried cod." They make up at least three-quarters of the population, which is estimated at between seven and eight millions. There do not appear to be any exact figures. As Col. Egerton remarks, the nature of the mass of people does not show much change from what it was when their monarchy was one of the leading Great Powers. That was some five centuries ago.

The character of the townsfolk, on the other hand, has, the author suggests, altered a great deal. He calls them unstable, sensual idlers. He quotes other writers who say that in their cafés Portuguese talk for the pleasure of hearing themselves; that they lack constancy, tenacity of purpose; that they "make promises on the generous impulse of the moment, but do not always remember to keep them." The change in these city-dwellers is attributed to abandoning the Portuguese tradition, to which the country people have remained faithful; and to the passionate eagerness of the educated to get into a government post, "to which no responsibility is attached and in which there is no incentive to any action, still less to any protracted effort."

THE present rulers, with Salazar at their head, are trying to break "this new and utterly objectionable tradition," which accounts for the Lisbon cafés being crowded at almost all hours of the day with men who seem to have nothing particular to do. Salazar has spoken of "changing the mentality of the Portuguese people." He himself has a mind which is the opposite of that which has been described.

He comes of a family of peasants. His father belonged to the middle class of cultivators, had just enough land to keep his wife and children in fair comfort. Below this class are those who have to hire themselves out, and above it those who can afford to hire, because their farms are large—too large for them to work entirely themselves. The future ruler of his country was a studious lad and became a professor of economics at an early age—he began university teaching in 1914, when he was twenty-five. Being interested in politics, he gave lectures on the measures which he thought should be adopted to get the nation out of difficulties caused by the incompetence of its kings and the hasty rehash of its institutions by Republicans after the monarchy had been abolished.

HE was especially emphatic about the possibility of democracy being harmonized with Roman Catholicism, but he has always, we are told by Col. Egerton, had his own definition of democracy. If it means that the poor and weak should be taken care of, that everyone should have "at least as large a share as they need of the common wealth, that the masses should be assisted by education to reach a higher stage of culture and well-being, and that all positions should be open to merit"—then he approves of it. But he does not consider equality possible, and he condemns democracy if it confers privileges on any section or class.

As a professor, he did not mix up politics with his teaching. He had no wish for political power, he always said. But he became very well known in Portugal for his views both on economic and on constitutional matters; and in 1926, when the nation's finances were in a bad way, the Army leaders who then governed asked him to become a Minister and try to put them straight. He accepted the call, but remained Minister only a few days. His colleagues found he had made up his mind as to what needed doing, and was determined to do it—without compromise or concession. They declined to work with such a man.

Exactly what happened then was not officially explained; it never has been. Col. Egerton says Salazar has kept the secret to himself. But his colleagues didn't; and what they say helps one to understand why, less than a week after his appointment, Salazar, putting a call through from his house to his office, was answered by someone who said: "Yes, what is it? Minister of Finance speaking." Salazar replied quietly: "Indeed, I thought I was the holder of that post. I see I was wrong." Then he went back at once to his University chair. The military dictators felt they had made a mistake in asking him to leave it.

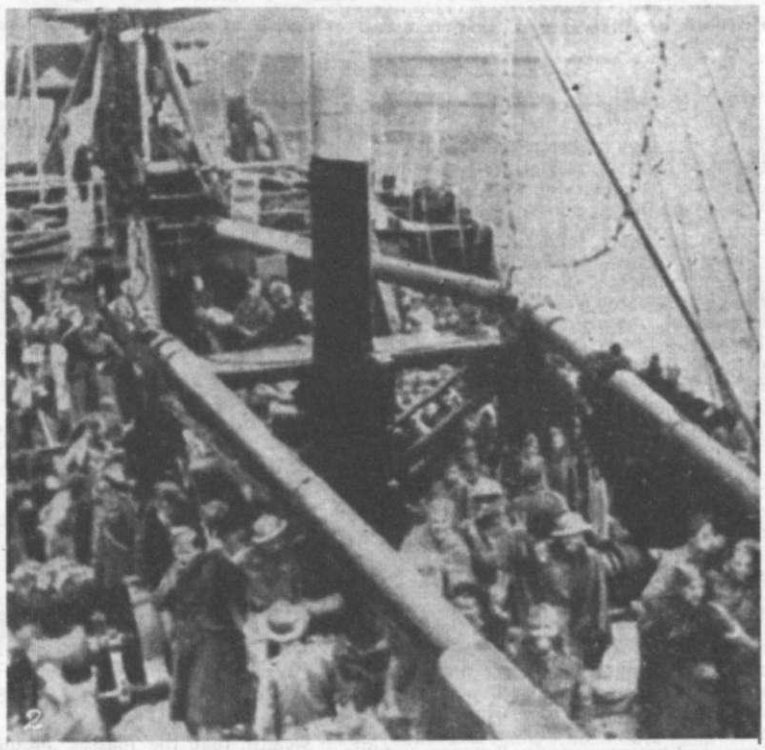
But in less than eighteen months they had made things so much worse that they were compelled to beg him to come back—this time with a free hand. He showed at once that he understood what was required to put Portugal on its financial feet. He risked unpopularity, but for that he cared little. He still cares so little that he will seldom consent to be photographed; few people know him. When the financial position had been righted, the highest place was open to him. He took it, and since 1932 he has been nominally Prime Minister, but really sole ruler, with a shadowy President in the background, who would take the count if by any chance Salazar were to be knocked out. At present there does not appear to be any likelihood of that happening.

His system is not democratic. Salazar said himself it is "anti-democratic." He does not allow freedom of speech or writing, political parties or strikes. The National Assembly consists of Government nominees. Criticism of the Government is a criminal offence. Salazar says this is the only system by which the Portuguese can be kept in order. He may be right. He did not impose himself on them. He was invited to rule. If his mother had been alive, he would not have accepted the invitation.

"I COULD not have taken up the burden," he once said, "if she had been anxious." What sort of man he is the book does not reveal, but he seems to have a sense of humour. When a critic of his measures, also a professor, went, as he thought, too far, he asked him to take over the department complained of. The professor demurred. He was also a bank director and the salary offered him was small. But Salazar made him accept the post, and must have been rather disappointed when the professor made a success of it!

DR. SALAZAR, Prime Minister of Portugal since 1932, is the subject of the book reviewed in this page. He is here seen—in centre, wearing black trilby hat—with his Under-Secretary for War, Capt. Santos Costa, inspecting Portuguese troops before they left to reinforce the Azores garrison in April 1941. *Photo, Associated Press*

Small Aegean Islands Lost to Allies for a Time



FALL OF COS AND LEROS, British-held Dodecanese islands, followed the capitulation to the Germans of the Italian garrison of the adjacent island of Rhodes, on Sept. 8, 1943. The enemy invaded Cos on Oct. 3 and by Oct. 26 had overcome Allied resistance, claiming 600 British prisoners: some are seen (2) landing at a Greek port. Leros was invaded on Nov. 12, an enemy equipment barge (1) on fire in Alinda Bay (see map in p. 442). The defenders were forced to give in four days later after the most intense bombing (3), which, because of geographical conditions and great distance of our fighter bases, the R.A.F. was unable to counter.

Photos, British Official: Crown Copyright: Associated Press

Crisis in the Lebanon Flares Up and Fades Out

THE LEBANON was from Nov. 11 to 24, 1943, the scene of serious crisis, imperilling Allied security in the Middle East. On Nov. 11 the French Committee of National Liberation suspended the Lebanese Constitution, abolished the Chamber, arrested the President, M. Bechara Khoury (1), and all but one of the Cabinet, installing a temporary Government. Deadlock had been reached between French and Lebanese over the latter's determination to make their independence — promised by Gen. Catroux on behalf of Free France in June 1941 — a reality. Demonstrators (2) marched in protest to the British and American Legations. Motor cyclist patrols (5) stood ready outside the Town Hall in Beirut, the capital. On Nov. 13 Mr. R. G. Casey (4—2nd from right), flew to Beirut to confer with Maj.-Gen. Sir E. Spears, British Minister to Syria and Lebanon (2nd from left). Two days later Gen. Catroux (3, taking salute) arrived; on Nov. 24 he announced the end of the "misunderstanding."

Photos, British Official; Crown Copyright; Associated Press

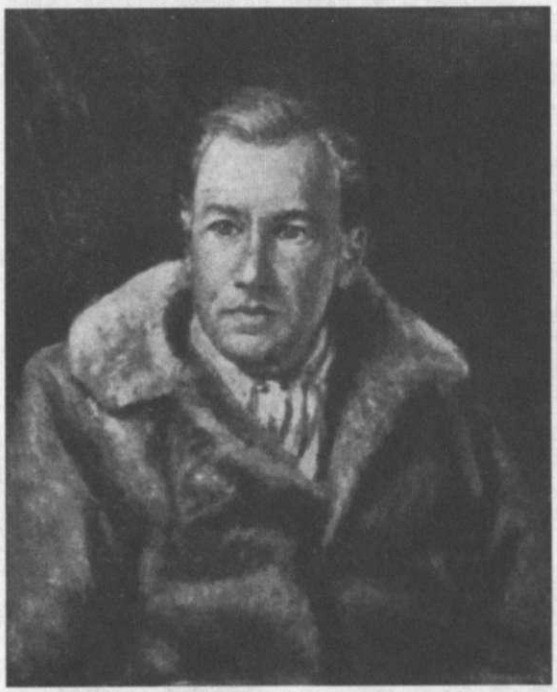
Specialist Flyers Dare Death for the R.A.F.

Daredevils of the skies, with consummate skill at their fingertips, with cool nerves and tremendous courage, throw planes about in the air to test their worthiness before these go into production or are flown in battle. And they help to probe the secrets of captured enemy aircraft. KEITH COOPER tells of the risks these pilots run. (See also facing page.)

FOR reasons of security little is allowed to be said of the work carried out by Britain's test pilots. But were it not for their daring, courage, and desire to serve the men of the R.A.F., our air casualties would be far heavier than they are today. Although every possible examination of a new-type plane is carried out in wind-tunnel tests, it remains for the test pilot, when the model is turned into the real thing, to see whether or not the plane is all its designer claims it to be. And it is not always a pleasant task.

I remember when Philip Lucas, 39-year-old test pilot for Hawker's, went aloft to test the strength and power of Sydney Camm's latest product, the Typhoon. Lucas, who has been a test pilot for over ten years, took the new Typhoon high into the air and began to put the plane through its paces. Suddenly, without warning, the machine developed tail vibration and part of the cockpit cover split.

The test pilot who had never baled out of a machine would have been justified had he done so on this occasion. But Lucas determined to bring the Typhoon down in one piece. Far below, on the tarmac, no one realized what a great fight he was putting up inside the cockpit—and he brought the plane down as though nothing had happened. Quietly he explained what had occurred. Officials studied Lucas's reports and devised improvements. Then the test pilot again took the Typhoon aloft, put it through its paces, this time successfully, and it went into production. Now this wonderful plane is taking toll of the German Air Force in the West, and Lucas has been awarded the George Medal.



Capt. GEOFFREY DE HAVILLAND, son of the head of the De Havilland Aircraft Co., is one of Britain's most skilled and intrepid test pilots. Here is a recent portrait of him by Mrs. Dulcie Lambrick. *By kind permission of the artist*

Jeff Quill, who tests Spitfires, is another who gets great satisfaction out of making sure that the machines his firm hands over to the R.A.F. lads of Fighter Command are in the best possible condition. During the Battle of Britain Quill, who is a quiet and retiring man, "ran the rule" over most of the Spitfire machines that went into service during that momentous period.

Capt. VALENTINE BAKER, D.F.C., of the Martin-Baker Aircraft Co., one of the band of fearless pilots who have lost their lives in testing new types of aircraft. *Photo, Fox*

THERE are many amazing stories told of this young man who tests enormously powerful planes with the same confidence as you and I walk. He once became mixed up in a "dog-fight" over Britain. Testing a Spitfire, he suddenly saw, just below, a squadron of German fighters, and several bombers, fighting it out with an outnumbered flight of "Spits." And Quill, so the story goes, swooped into action. Although there has never been any official record of this incident, Quill, according to pilots who took part in that battle, shot down three of the Huns before they turned for home.

The first Spitfire ever flown in this country was in the charge of Captain "Mutt" Summers, who is still on active service. A most remarkable pilot, he has flown nearly three hundred different types of plane and has spent well over 6,000 hours in the air during his near-twenty years as a flyer. On one occasion a plane he was testing broke into a million pieces and many of these fragments pierced his parachute—but Summers landed safely. Once, too, when trying out a secret fighter, he glanced out of his cockpit and found a Hun flying close, so Summers promptly disappeared with great alacrity, into a cloudbank.

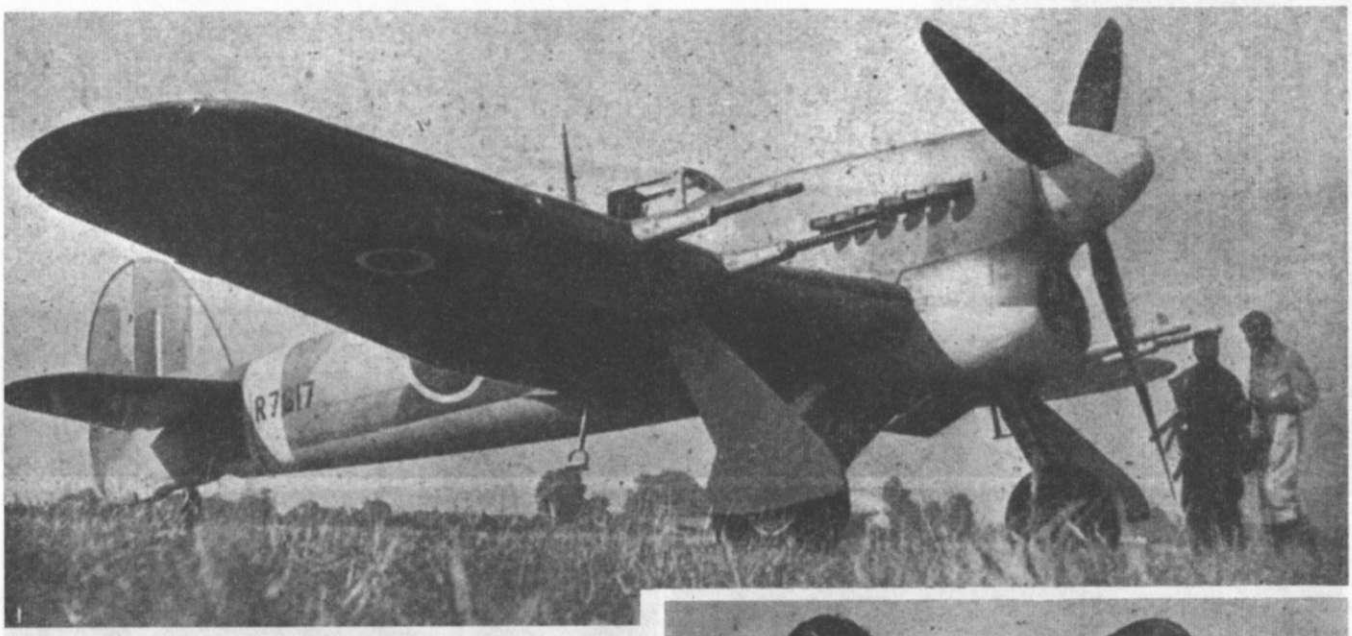
These test pilots, as I have noticed when talking to them, are grave and quiet men who take a very serious view of their job, utterly different from those sometimes portrayed on the screen. And it should be noted that not all of them are young men. Captain Barnard, of the Ministry of Aircraft Production, is over 50 years of age, yet as fit and able as most younger men. He has flown nearly every kind of plane, from a Spitfire to a Lancaster, and is a perfect example of the fine type to be found among Britain's test pilots.

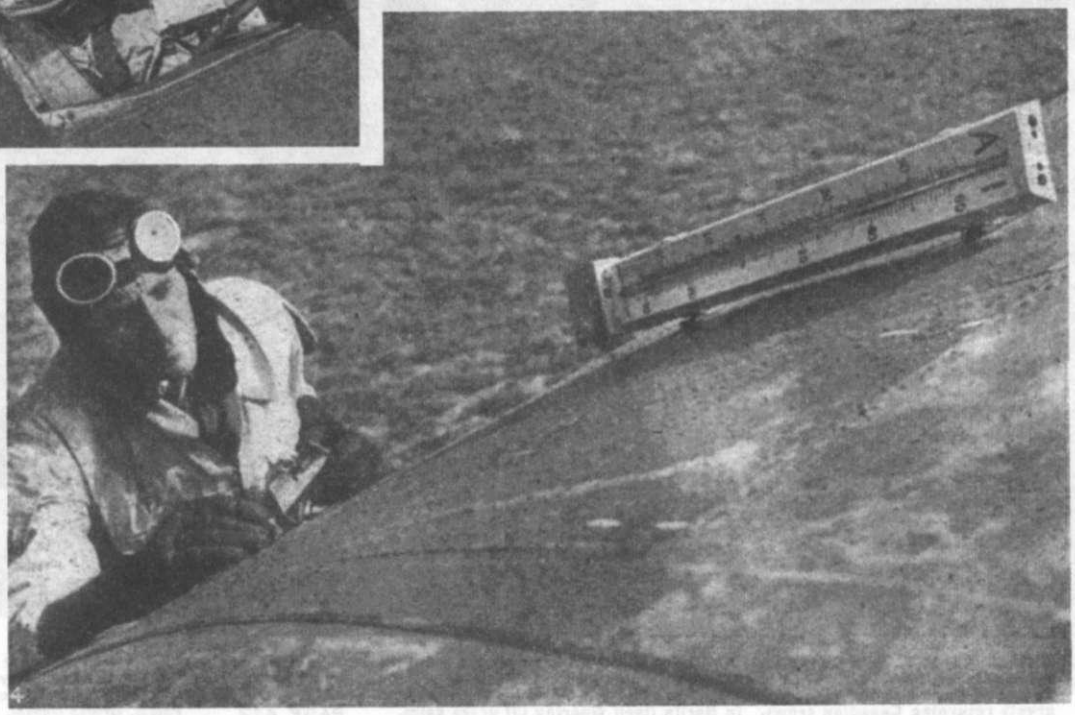
As well as making sure that the products of our factories are perfect, these specialists also fly captured enemy planes and discover their strong and weak points. Such valuable aircraft as the F.W.190, and certain types of M.E.s, have had their secrets probed by these daredevils of the skies. And their reports have played a big part in assisting our fighter squadrons to take measures to overcome the power of the Luftwaffe's latest. One of the R.A.F.'s greatest experts in the flying of captured enemy machines is Wing-Commander Wilson. His experience in this direction is unequalled. It is said by his colleagues that he is more at home in a Heinkel than a Wellington—but they are only joking!

As one would expect from such a dangerous calling, many of these men pay the supreme price for their courage. Young John De Havilland, one of three pilot sons of Capt. Geoffrey De Havilland, senr. (head of the De Havilland Aircraft Co.), was killed in a collision between two Mosquitoes in the air near St. Albans, Herts, on August 23, 1943. Christopher Staniland of Fairey Aviation Company; P. E. G. Sayer of the Gloster Aircraft Company, and Captain Valentine Baker, D.F.C., of the Martin-Baker Aircraft Company, are but a few of the gallant band of daring flyers who have also lost their lives in the service of their country. When the time comes to lay down the burden other venturesome young pilots take it up, scornful of possible consequences. The debt we owe to them cannot be reckoned by ordinary standards.

PHILIP C. LUCAS, G.M., chief test pilot of Hawker's. For his courageous and invaluable work with the prototype of the Hawker Typhoon (see article in this page) he was awarded the George Medal. *Photo, G.P.U.*

Ordeal by Swift Trial for Pilot and Plane

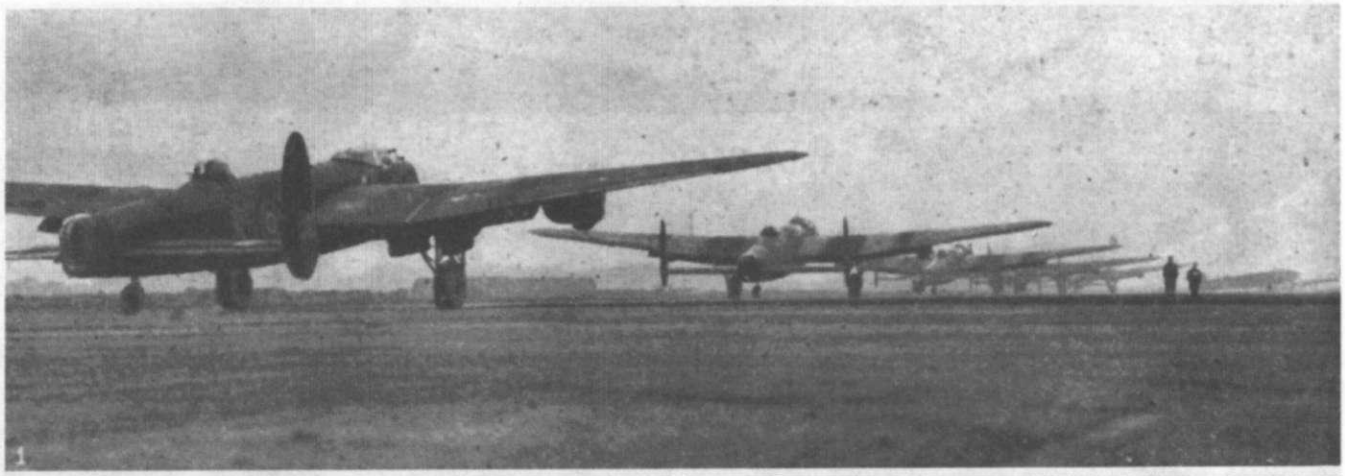


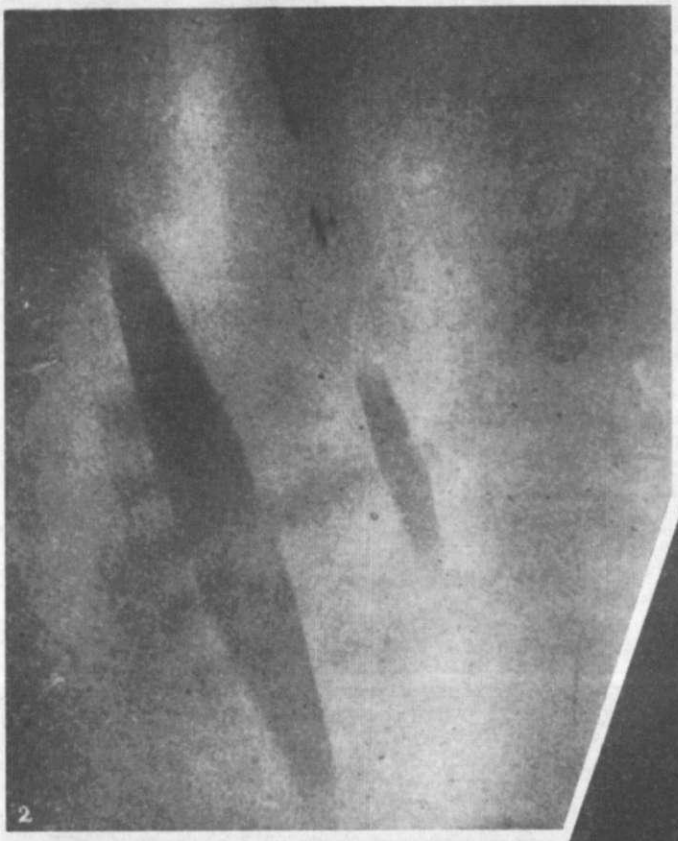


FROM BLUEPRINT to full production of an aircraft is a long and cautious process, and possibly the most vital stage is that of the testing of the prototype. Theory and laboratory tests can go only so far; ultimately the first specimen must take to the air, there to justify its designer's hopes, or confound them in disaster and maybe death for the test pilot. Typical of these experts is Ralph Munday (2) of Hawker's. He made exhaustive try-outs of the Typhoon (1), one of the fastest fighters in the world, following the initial flight by his colleague, Philip C. Lucas (see article and photograph in facing page). Airborne, the pilot must take constant notes of such details as altitude temperatures, recorded on a wing thermometer (4). Yet another flight successfully over, Munday discusses technical progress (3) with confrère Capt. H. S. Broad (right).

Photos, Topical Press

Centre of Nazi War Machine Again the Target





HEART OF HITLER'S CRUMBLING EMPIRE, Berlin has now the grim distinction of being the world's most bombed city, following five consecutive night attacks, Nov. 22-26, 1943. Lancasters (1) line up for the take-off. Four miles above the target (2) they are ghostly shapes amid smoke and cloud. Home again, a bomber (5) is guided up the runway. Air Vice-Marshal G. E. Brooks, A.O.C. Royal Canadian Air Force Bomber Group in Britain (4), greets returning Canadian crews. In Berlin itself Goering (3) urges calm.

Photos, British Official, Associated Press, G.P.U., Keystone

I WAS THERE! Eye Witness Stories of the War

We Stoked Berlin's Still Smouldering Fires

Canadian-built bomber Q for Queenie took part in the great all-Lancaster assault on the night of Nov. 26, 1943, when over 1,000 tons of bombs showered down on Berlin. It was her first operational trip, described here by a Canadian Public Relations Officer who accompanied Queenie's crew of seven members of the R.C.A.F. Pathfinder Squadron.

BEFORE us Berlin was marked by the white pillars of searchlights, balls of anti-aircraft fire and the dim glow of old fires which smouldered through the wreckage left by raiders during the previous two nights. Behind us, after the Pathfinders' bombs had started scores of new fires, was a ruddy glow visible from Hanover, more than 100 miles on the homeward journey.

Berlin's 35-mile area was dotted with light so that it was hard to distinguish the bursting of anti-aircraft shells below from the coloured marking flares dropped by the Pathfinders, or the results of the first bomb-bursts. Pin-pricked across were innumerable flecks of light marking the sites of incendiary bombs, and almost indistinguishable among the pyrotechnical background, were small, dull squares where fires had done their work and were burning themselves out through the skeleton of some building.

From over 20,000 feet the entire picture was dominated by numerous white flares, centred off to one side of the target area. The coloured flares of the Pathfinders stood out in sharp contrast, and new fires were neatly ringing the carefully placed flares.

The attack swept in from the south, and apparently caught the defenders by surprise. The approach was a steady movement from England to the target, but the return was a severe test of the aircraft's manoeuvrability. The pilot hurled the aircraft into an endless series of zigzags as the searchlights attempted to cone the bomber, and fighters appeared and were spotted by the watching gunners. As soon as the casual "Bombs away!" report was given, the rear-gunner cut in with, "Better get her weaving, Skipper. There's a Jerry fighter below!"

As Q for Queenie waltzed away from the bombing run a number of searchlights caught and coned the Focke-Wulf 190 below and to the port side of the bomber. So eagerly did the search-light batteries concentrate on their own aircraft that the pilot fired a recognition flare. By the time the lights took up their probing again Q for Queenie was some distance away, and the wireless operator was muttering into his micro-phone, "I'll bet there's 700 searchlights there right now!"

One of the crew placed his mouth against the flap of my helmet to shout, "There goes one of ours!" He pointed to the target area, and we saw a large orange ball floating earthwards under a parachute of oily smoke. No one spoke over the inter-com. until the mid-upper gunner warned, "Jerry kite just passed overhead, starboard quarter." Soon serried rows of searchlights came into view, and the bomber, which was steadily climbing despite its gyrations, had reached over 20,000 feet when the navigator informed the cap-tain, "The Dutch coast is now about 20 miles away."

"Coast coming up!" the bomb-aimer reported in a few minutes, and the pilot clipped, "Here we go. Watch your ears, everyone!" He pushed the control column slightly, and Q for Queenie began to gain speed on its final lap towards home. As we crossed the North Sea the sparks from the speeding engines lightly traced the shape of the wing behind each of the four engines. The voices on the inter-communication system became less clipped as the bomber reeled off the miles, although the tall crew-men, with their muzzle-like oxygen-micro-phone masks, loomed through the semi-darkness inside the craft like Martians, as they checked instruments and peered end-lessly above and below.

Keep Your Eyes Skinned!

"Take a look and see if everything's clear underneath," suggested the pilot to the bomb-aimer. He wanted to be sure there were no "hang-ups." A few seconds later the bomb-aimer announced: "Clean as a chicken," and someone commented: "Good show, and a darn good prang!" It was as the last possibility of aerial mishap seemed to disappear that the air-gunner disclosed that Q for Queenie had dropped more than "cookies" (block-busters) on Berlin.

Soon the searchlights of England were seen stabbing the sky, and the gunners were warned, "Possible enemy planes—keep your eyes skinned!" The course carried the bomber past the lights, and the welcome light of the home-base was seen amidst the runway markers.

"Q for Queenie calling base. May we land?" the wireless operator asked. "Okay to land, Q for Queenie. Okay to land," replied the voice of a W.A.A.F. operator, and the first operational sortie of Canada's first lady of the air ended with an absolutely perfect landing.

'G FOR GEORGIE,' a Lancaster which has taken part in 71 missions, including the Berlin raids of Nov. 23 and 26, 1943. W/O H. Carter, of New South Wales, is at the controls.
Photo, Associated Press

'D FOR DONALD,' safely home from one of the "prangings" of Berlin. Its crew's first responsibility on landing is to report, to the Engineer Sergeant of the flight, on the performance of the aircraft throughout its long and hazardous mission.
Photo, G.P.U.

I Left My Pots and Pans and Downed a Bomber!

Ship's cook, Petty Officer J. H. Hubbard, of the cruiser Aurora on service in the Mediterranean, had already been mentioned in dispatches when he achieved the further distinction of shooting down a German bomber. This feat, which surprised the rear-admiral, has won him the D.S.M.

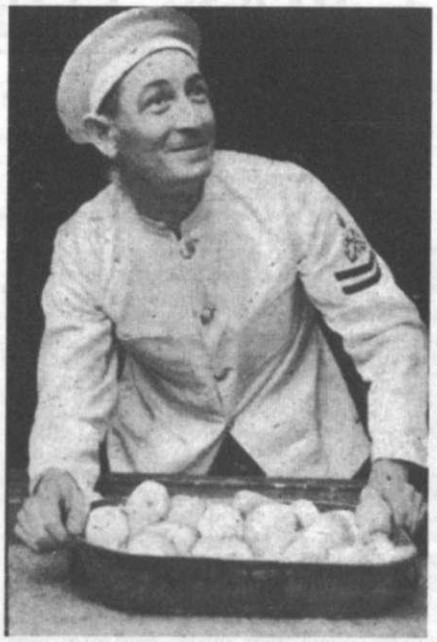
THE Aurora was on harbour guard duty at Bône, North Africa. Everything was quiet, and I was among my pots and pans in the galley. Suddenly the alarm "Repel enemy aircraft" was sounded. I left everything and dashed to my action station as No. 2 Oerlikon gunner. Almost immediately a Focke Wulf 119 appeared out of the clouds on the port bow. It was followed by a second and a third.

They were diving to attack shipping in the harbour. I got the second one in my sights, followed him round, waited until he got within range, and pressed the trigger. I saw a stream of tracer bullets enter the aircraft amidships. It swerved away, lost height and crashed on land.

The whole thing was witnessed by Rear-Admiral C. H. J. Harcourt, commanding our squadron, who expressed surprise when he learned that a ship's cook had been responsible for bringing down the bomber!

Actually a cook has as much chance of success in an action like this as any other member of a ship's crew. We are all trained in gunnery, all have our action stations, and I've fired thousands of rounds at enemy aircraft, particularly during the hectic days of the 1941-42 Malta convoys.

I manned a gun during the Oran landing, and had many a showdown with enemy aircraft during the Malta blitzes. It was the experience I got then which helped me to bring down the Focke Wulf.



P/O Cook J. H. Hubbard, versatile hero of an astonishing exploit in the Mediterranean. Simply and without fuss he tells in this page how he won the Distinguished Service Medal.
Photo, British Official

They Bombed Us, But We Landed Our Ammunition

Sailing in convoy to the Mediterranean, carrying 6,000 tons of ammunition, incendiary bombs and military trucks, the steamship Empire Brutus was attacked and hit by German bombers. Her skipper, Capt. C. J. B. Cornwall, tells the dramatic story (given here by courtesy of The Daily Telegraph) of how she weathered the storm and won to port. The cargo she carried is now being used by us on the battlefields of Italy.

ONE bomber broke formation and headed straight for the ship. From the bridge I saw a stick of bombs falling towards us. I had no time to take avoiding action. One of the bombs struck the rail a few feet below where I was standing, glanced off, and burst alongside at water level.

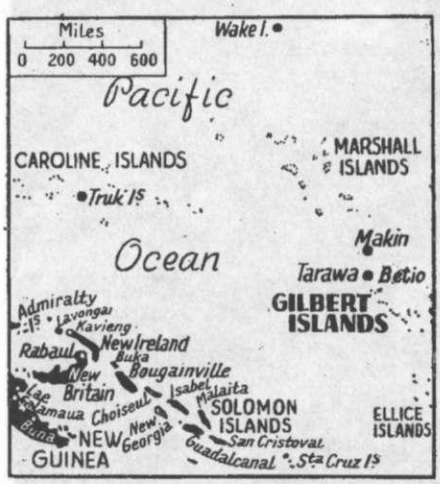
The explosion rocked the ship. A gaping hole was blown in her side. Thousands of gallons of water poured into the engine-room. The stokehold filled with coal-blackened water. The bulkhead between the engine-room and No. 3 hold collapsed. The hold flooded.

As we appeared in imminent danger of breaking up, I gave orders to abandon ship. The crew took to the boats, rowed to a safe distance, then sat at their oars for half an hour, watching the ship. The commander of a corvette was standing by to pick us up. He shouted through his loud-hailer, "What are you going to do, captain?"

"I'm going back," I replied. I asked for volunteers. Every man agreed to return. I chose 23 men. An Admiralty tug took in tow the Empire Brutus, which was now heavily water-logged. All that night, with the ship groaning beneath them, the crew stood to their posts. The next morning my crew climbed into the flooded bunkers, filled buckets with the coal, and passed it aloft to be dumped aboard the tug.

A German plane flew overhead. An hour later a Liberator appeared and stayed with us for the rest of the day. Empire Brutus and the tug continued in this way for five days and nights. Several times I was afraid she would break up, but eventually, after travelling 210 miles at an average speed of just over two knots, we brought her triumphantly into port.

The port authorities asked me to beach her on a sandbank. I refused. I told them that if the ship had stayed afloat so long she would keep up a bit longer! We discharged the cargo into another ship.



BETIO ISLAND, in the Gilberts, was the scene of one of the bloodiest Allied victories during the whole Pacific campaign, as is made evident by the personal story on the right.
Map by courtesy of News Chronicle

I Saw the Japanese Annihilated on Betio Island

War Correspondent Henry Keys saw from start to finish the savage battle of Betio, in the Gilberts—saw how this Japanese stronghold in the Pacific was won from them in desperate and costly fighting from Nov. 20 to Nov. 23, 1943. His story is given here by arrangement with The Daily Express.

I SAILED with the greatest armada America has ever set afloat to see this battle from start to finish. For four days appalling punishment was rained on the 4,000 defenders of Betio Island, but they fought back all the time. Warships of all types, from 16-in. battleships to destroyers, delivered more than 2,200 tons of shells on the 540-acre atoll.

Aircraft plastered it with 700 tons of bombs, many of them 2,000-pounders, and strafed it with a million rounds of 50-calibre explosive bullets. A little palm-covered Pacific isle was turned into a hell on earth. And the Japs never gave in. They were annihilated.

In peace or war Tarawa has been the most important in the chain of the Gilbert Archipelago. Betio is a chop-shaped island at the west end of the chain, about 4,000 yards long. It is 400 yards wide at one end and tapers to a narrow point. It averages six feet above sea level, and is nowhere more than 12 feet. On it the Japanese built their only airfield in the Gilberts, and fortified it to such an extent and with such military excellence that they can be forgiven for thinking it was impregnable.

The American Command believed it to be good too. For this reason battleships, carriers, cruisers and destroyers were sent to escort the transports and to bombard the atoll mercilessly. Within a few minutes of the enemy's first fire the 16-in. guns of the flagship from which I watched the battle roared in reply. The muzzle blast of the giant guns was fiercely hot, and the fumes of cordite burned our faces, while, involuntarily, we bent at the knees from the shock of the terrible concussions.

Our success was almost immediate. An enormous fire started in the centre of the island, bursting into explosions every few seconds. We had hit an ammunition dump. A few minutes later we knocked out one of the enemy batteries. Two other battleships, as well as cruisers and destroyers, moved into position for a planned bombardment, and for the next four hours naval guns poured a stream of glowing shells on the island.

The flagship moved in to 5,000 yards. Even at that distance it was possible to feel the shock of the explosions on Betio transmitted through the water and the structure of the heavy ship. By dawn many fires on the atoll glowed redly into rolling masses of black smoke.

2,000-Pounders Rained Down

Our fire slackened only a few minutes before the dive-bombers were due. This was to allow the smoke and dust to clear away so that the pilots could see the targets. The first bombers carried 2,000-pounders. One after another, in a seemingly endless chain, they peeled off and shot to earth, pulling out only a few hundred feet above the ground. After the bombers came the strafers, and then the bombardment was resumed.

Lieut.-Commander R. A. Macpherson, flying the flagship's observation plane, reported the utter destruction in the key areas, and that the further shelling of them was pointless. The beaches where it was proposed to land received most attention. An area a mile long and 50 yards deep received a bombardment equivalent to 20 lb. of explosive per square yard. As the warships continued the monotonous pounding, armoured landing vessels with the first wave

of assault troops moved on Betio; literally hundreds of these vessels dotted the water. They seemed a formidable yet a forlorn force at one and the same time. Then the shelling suddenly ended. The landing craft negotiated the reef against only light enemy fire. But once ashore the Marines found that the Japanese had recovered quickly. Solidly entrenched in coral and concrete dug-outs, pillboxes and blockhouses, behind 5-ft.-high parapets along the beaches, they opened fire with automatic weapons.

Mowed Down the Marines

The Marines had no cover. Second waves encountered even greater difficulty from heavy cross-fire. One 75-mm. gun, which was still working, totally destroyed several landing boats, while light and heavy machine-gun fire mowed down the Marines as they floundered 800 yards through the surf to the shore. It was some hours before they could penetrate beyond the Japanese parapets. Though many of the enemy had been killed and his major gun positions destroyed, Saturday's advances were so small and the position of the Marines so insecure that by nightfall the situation was obviously critical.

We were not going to win, if we won at all, without very heavy casualties. However, although the Marines barely had a toehold, the Japanese were scarcely fit to counter-attack. Saturday night they remained below ground, enabling the Marines to maintain their positions.

This led to a wave of optimism on Sunday morning. But a few hours later the situation was again critical. A Jap counter-attack had partially succeeded. By noon the Marines staged a recovery. They drove across the centre and western end of the island, and took part of the airfield. But few of the Japs could be got at. They were up to their old tricks of sniping from the trees and from heavily protected machine-gun nests. To advance at all the Marines had to dig out the enemy with grenades.

This was laborious and costly. All Saturday and Sunday the Marines had the fullest support of naval and aerial bombardment on request. From dawn till dusk the planes bombed and strafed. Destroyers closed in to automatic weapon range. By Monday morning, though still dangerous, the position had crystallized, and it was clear that we should get control.

When I landed on Betio yesterday the island looked ghastly and bizarre. Nowhere did there seem to be an inch not struck by shell or bomb. Then last night the Japanese counter-attacked again. Leaving their holes at the eastern end, a large number tried a wild yelling bayonet charge along the south beach. It lasted but a few minutes. The enemy reeled back madly under devastating Marine artillery fire. Other troops tried yesterday to wade from Betio to the next atoll of Bairiki, two miles away.

Enemy Completely Annihilated

They found themselves under fire of the Marines, who had landed on Bairiki, and the automatic weapons of the destroyers standing by for that purpose.

Driven back into the hell of Betio, they fought like rats in a trap, and fought as only desperate, well-trained men can fight. General Smith announced early this morning that complete annihilation of the enemy could be expected by afternoon. He was right. Around noon word went over Betio that the island had been officially declared "secured." But even then snipers still fought on.

INCENDIARIES ARE LOADED on a U.S. bomber whose appointed target is installations on one of the Tarawa islands, in the Gilbert group, South-west Pacific (see map in facing page). *Photo, U.S. Official*

OUR DIARY OF THE WAR

NOVEMBER 24, Wednesday *1,544th day*

Italy.—Announced that Alfedena occupied by 8th Army.

Russian Front.—Anufrievka, in Kremenchug region, captured by Russians. Germans launched fresh assaults on Kiev salient.

Australasia.—Announced four Japanese destroyers sunk in recent naval battle off the Solomons.

Pacific.—U.S. escort carrier Liscombe Bay sunk off Gilbert Islands.

Air.—Ludwigshafen attacked by Halifaxes. Mosquitoes bombed Berlin.

NOVEMBER 25, Thursday *1,545th day*

Italy.—8th Army crossed the Sangro and established substantial bridgehead. Gen. Montgomery in Order of the Day to his troops declared that the Germans would be dealt a "colossal crack."

Russian Front.—Propoisk, on River Sozh, taken by Red Army.

Air.—Frankfort-on-Main raided. Berlin attacked by Mosquitoes.

NOVEMBER 26, Friday *1,546th day*

Italy.—8th Army consolidated newly-won gains across Sangro River.

Russian Front.—Gomel taken by Soviet troops.

Australasia.—Sattelberg, New Guinea, captured by Australians.

Pacific.—Revealed very heavy casualties suffered by U.S. troops in Gilbert Is.

Air.—Berlin (over 1,000 tons of bombs dropped) and Stuttgart heavily raided at night. Heaviest U.S. air attack of war on Bremen.

General.—Three-Power Conference held in N. Africa between British, U.S. and Chinese representatives, headed by Mr. Churchill, President Roosevelt and Generalissimo Chiang-Kai-shek, ended after five days of discussion beginning Nov. 22. Measures decided upon to intensify war against Japan and liberate territories she has occupied.

NOVEMBER 27, Saturday *1,547th day*

Russian Front.—Soviet troops steadily advanced into White Russia, last Soviet Republic east of Poland.

Sea.—Admiralty announced loss of the submarine Trooper.

NOVEMBER 28, Sunday *1,548th day*

Italy.—8th Army launched offensive across Sangro River under air cover.

Russian Front.—German attacks in Brusilov, Korosten and Chernyakhov areas repulsed. Cherchesk, Rogin, Pruda and Velsk seized by Russians.

General.—Mr. Churchill, Marshal Stalin, and President Roosevelt met at Teheran (Persia) to discuss next phase of war with Germany and problems of post-war world.

NOVEMBER 29, Monday *1,549th day*

Italy.—Announced that in fresh 8th Army offensive bridgehead across Sangro at Archi secured, and gap torn in German winter defence line.

Mediterranean.—Serajevo (Yugoslavia) raided by Allied bombers.

Russian Front.—German offensive persisted S. of Kiev salient in Korosten, Chernyakhov and Brusilov areas.

Australasia.—Announced fresh Japanese counter-attacks repulsed at Sattelberg (New Guinea).

China.—Japanese entered Changteh.

Pacific.—Announced Vice-Admiral Kindaid to command Allied naval forces in S.W. Pacific.

Air.—Bremen heavily attacked by escorted U.S. Fortresses.

General.—Mr. Churchill presented Marshal Stalin with the Sword of Stalingrad, at Teheran.

NOVEMBER 30, Tuesday *1,550th day*

Italy.—Stated that all high ground commanding the Sangro valley in British hands. Santa Maria, Mozzagrogna and Romangoli captured. New Zealand troops rejoined 8th Army.

Mediterranean.—Durazzo (Albania) bombarded by British destroyers.

Russian Front.—Russians announced withdrawal from Korosten, captured by them on Nov. 17.

Air.—Solingen, 14 miles E. of Düsseldorf, attacked by escorted Fortresses.

DECEMBER 1, Wednesday *1,551st day*

Italy.—Announced that Castel di Frentano, and Casoli, taken by 8th Army. British troops advanced beyond Rocca San Giovanni. Turin ball-bearing works bombed.

Australasia.—Announced Australians had taken Bonga (New Guinea).

Air.—Solingen attacked for second successive day by Fortresses.

General.—Teheran Conference ended; plans for the destruction of the German forces concerted; responsibility for an enduring peace assumed by the three Powers.

DECEMBER 2, Thursday *1,552nd day*

Italy.—Capture of Fossacesia-Romangoli ridge completed after heavy fighting. 5th Army launched offensive, preceded by barrage of 650 guns.

Mediterranean.—Marseilles submarine pens attacked by Fortresses.

Russian Front.—Zavod and Buda, in River Pripet area, occupied by Russians.

Air.—Berlin (1,500 tons of bombs dropped) heavily raided.

DECEMBER 3, Friday *1,553rd day*

Russian Front.—Dovsk and Sverskea, N.W. of Gomel, Koristovka and Novo Georgiev, S.W. of Kremenchug, captured by Red Army.

China.—Japanese captured Changteh.

Air.—Leipzig bombed in concentration attack; 1,500 tons of bombs dropped.

DECEMBER 4, Saturday *1,554th day*

Italy.—Capture of Treglio, Lanciano and Orsogna by 8th Army announced.

Russian Front.—Gorodets, in Rogachev region, and Khalch in Zhlobin sector, taken by Soviet troops.

Pacific.—Kwajalein and Wotje atolls (Marshall Islands) attacked by U.S. aircraft carrier task force.

General.—Mr. Churchill, President Roosevelt and M. Ismet Inonu, President of Turkey, met in Cairo to discuss general political situation and examine policy to be followed.

DECEMBER 5, Sunday *1,555th day*

Italy.—Announced San Vito captured by 8th Army.

India.—Calcutta raided by Japanese for first time in daylight.

Pacific.—Mili atoll (Marshall Islands) raided by Liberators.

DECEMBER 6, Monday *1,556th day*

Italy.—Announced that 8th Army had reached line of Moro River.

Mediterranean.—Recent successes by H.M. submarines in this theatre announced; 17 enemy ships sunk.

Russian Front.—Aleksandriya, S.W. of Kremenchug, captured by Russian troops. Announced that German and Finnish guns were shelling non-military objectives in Leningrad.

Sea.—Announced that destroyer Hursley and 4 corvettes handed over by Royal Navy to Greek Navy.

General.—Third phase of Allied conferences in Middle East successfully concluded; conversations with Turkish President said to be "most fruitful." Gen. Smuts arrived in Cairo.

DECEMBER 7, Tuesday *1,557th day*

Italy.—Revealed that 8th Army troops had crossed the Moro River; fighting on Monte Maggiore and Monte Camino.

Russian Front.—Pantayevka in Kremenchug region captured by Red Army; certain localities yielded to Germans in Chernyakhov area.

Sea.—U.S. battleship Wisconsin (45 000 tons) launched at Philadelphia Navy Yard.

Flash-backs

1939

November 30. *Helsinki bombed in first day of Russo-Finnish war.*

1940

November 30. *Pogradets captured by Greek troops.*

1941

November 27. *Italian garrison of Gondar (Abyssinia) surrendered to British and Ethiopian troops.*

November 28. *Rostov-on-Don retaken by Russians.*

November 30. *Tobruk-Sidi Rezegh corridor broken by German assault.*

December 2. *H.M.S. Prince of Wales arrived at Singapore.*

December 7. *War with Japan began. Libyan tank battle resumed at Bir-el-Gobi.*

1942

November 27. *German troops entered Toulon. French warships in harbour scuttled by crews.*

December 7. *Allied armour forced German withdrawal at Tebourba.*

EAST MEETS WEST IN PACIFIC VICTORY CONCLAVE. The Conference, which ended on Nov. 26, 1943, after five days' minute examination of the strategic approach to the complete defeat of Japan, had the Mena House Hotel, near Cairo, for its setting. It was attended by Marshal Chiang Kai-shek, President and Generalissimo of China (see illus. p. 463), Mr. Roosevelt and Mr. Churchill, and their advisers. Mme. Chiang Kai-shek acted as interpreter for her husband. Composition of the delegations showed that the conference was mainly of a military character, and the official announcement of the conclusions reached, made in Cairo on Dec. 1. revealed complete unanimity among the Allies. Pressure on Japan is to be increased and sustained until she has disgorged all the territories " she has taken by violence and greed." Korea, Manchuria, Formosa, the Pescadores and the Pacific islands occupied since her treacherous swoop on Pearl Harbour on Dec. 7, 1941, are notably listed for redemption. This happily informal conference photograph shows : Front row, l. to r., Marshal Chiang Kai-shek, Mr. Roosevelt, Mr. Churchill, Mme. Chiang Kai-shek ; back row, l. to r., Sir A. Cadogan, Mr. Eden, Mr. L. Steinhardt, Mr. J. G. Winant, Mr. H. Macmillan, Dr. Wang Chung-hui, Mr. R. G. Casey, Lord Killearn, Maj. Desmond Morton, Mr. A. Harriman. an unidentified delegate. and Lord Leathers. *Photo, British Official : Crown Copyright*

THE WAR IN THE AIR

by Capt. Norman Macmillan, M.C., A.F.C.

THREE important developments have occurred in the air war which are, curiously enough, representative of the all-embracing nature of air power. In Germany, Berlin has been heavily bombed. In Italy, the Eighth Army's attack on the Sangro front broke through the strong German winter defence line carved out of rock, after artillery and air bombardments of which it was stated that the air element was not much less effective and accurate than the gunnery element. In mid-Pacific, some of the Gilbert Islands were occupied by a United States amphibious task force after an air bombardment of the Japanese holding force as great as one of the bombardments of Berlin (see story in page 474).

Here are illustrated the three sides of air war—the independent strategic action, the preparation for the advance of an army, and the preparation for the employment of a naval amphibious force. There is no other service capable of this universal action.

No force but an independent air force could bomb Berlin as Bomber Command bombs it (see pages 472-473). The United States Army Eighth Air Force based in Britain for the bombing of Germany and occupied Europe is an independent strategic air force, too, detached from the army. The difference between Bomber Command and its American opposite number is that the British force is organized and provided for by a separate Ministry, whereas the American force is organized and provided for by the War Department. In action there is no difference, and in this war the U.S. Air Force is moving towards a separate air force organization, despite the opposition of those whose interests or inclinations are of a contrary tendency.

It was Britain's failure to produce a separate strategic striking force in the early part of the 1914-18 War that brought the Smuts Report to the War Cabinet into the political arena of those days and created the requisite conditions for the establishment of the separate Royal Air Force. If we had not taken that step then, and, against the cruellest opposition, afterwards upheld the policy of an independent air force, reactionary interests would have carved the Royal Air Force into two and handed one part to the Navy and the other part to the Army; and there would have been no adequate force to bomb Germany, nor would there have been a sufficient or rigorously-enough trained fighter force to have won the Battle of Britain, the initial victory from which all other Allied victories in this war have sprung. And so this still greater war might possibly have been already lost to us.

PRESSING THE BUTTON that unloads death-dealing steel. This is a Mark IX bombsight and release in a British Lancaster bomber.
Photo, British Official: Crown Copyright

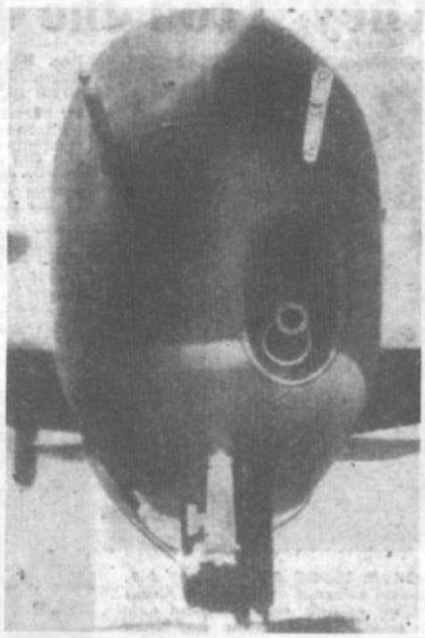
POLICY Which Saved Britain and Helped Turn the Tide

Even as things turned out, the power of the strategic independent bombing force was delayed because of the demands made upon the Air Force by the other services on land and at sea who, before the war, fought tooth and nail to secure the largest shares in the defence votes, and by that very action were responsible for the inability of the Air Force to do more than it was feasibly able to do during the early part of the war.

Yet the technical deficiencies in the land and sea forces were greater than in the Air Force. The British Expeditionary Force went to France without a single gun-tank, parachute troops, or tommy-guns. What use were the Prince of Wales and the Repulse, or the guns of the naval defence of Singapore? Why did the Hood blow up when the Bismarck was so difficult to sink? What proportion of Italy's navy was crippled by aircraft, and what by ships? Why was Germany winning the submarine war at sea until the Air Force really got cracking on the job? And what could the Army have done if the Air Force had not won the Battle of Britain?—an army, as Mr. Churchill said, bereft of its equipment, with few tanks, and few guns. If there is any policy which can be said to have saved Britain in this war and brought about the turning of the tide, it was the policy of the independence of the Air Force.

The guns of the present-day British army are extremely accurate. They are numerous. It is a remarkable statement that the barrage provided by the Air Force was almost as effective and accurate as that of the massed guns upon the Sangro front before the Army broke through. Those who have been closely associated with the development of air power have never doubted that the accuracy of air bombardment would eventually equal that of gun bombardment. But here is the evidence of groundsmen in support of the belief of those who know the air.

BUT there is more in air bombardment than that. The aeroplane is the most mobile of all weapons. No army can retreat fast enough to escape it. They may pull out of range of the guns until they decide again to stand, but they cannot pull out of range of air bombardment. Thus, taken in the aggregate, before, during and after the battle, the tactical air force must be at least as great as, if not greater than, the artillery in its effect upon the enemy. And that does not take into account the field strategical air force, which, before the action, began to cut the lines of communication with the enemy army by its attacks upon railway bridges and junctions, ports, ships, locomotives and rolling stock, and factories and dumps. Nor does it take into consideration the accurate photography from the air which makes the whole plan of action possible, and which reveals in detail the enemy machine-gun nests and strongly defended points.



NOSE OF A MITCHELL B-25, American medium bomber, now fitted with 75-mm. (3-in.) cannon, equivalent to a powerful field gun—probably the most sensational development in aircraft armament revealed since this war began. *Photo, Keystone*

The work of the Air Force under Tedder and Coningham has shown that the independent air force represented by the R.A.F. is the finest field air force in the world, and that all the ancient claptrap of the need for an air force in khaki is just the wind of propagandists. If Malaya had been the defence responsibility of the Air Force instead of the Navy, we might never have lost Singapore. At least, the Japanese Air Force would have been decimated as was the German Air Force in the Battle of Britain, and it would have been unable to blast a way through for the oncoming Japanese Army.

PUNISHED As No Islands Have Ever Been Dealt With Before

In the American occupation of the Gilbert Islands we see the procedure in reverse. A great air force swoops upon the selected islands and blasts them as no islands have ever been pounded before, except perhaps Pantelleria and parts of Sicily. The air forces hold off the enemy warships, prevent them from getting near the scene of action, the landing forces go ashore, and four days later an aerodrome is crushed flat out of the coral rock of the atoll and the aircraft begin to land. Here again the aeroplane is the core of the whole action, forming at once an attack, holding and occupying weapon, without which no operation in modern war can be sure of success, and with which, in adequate numbers and types of aircraft, no operation in modern war need fail.

But are we sure that in these great diversions of the use of air power in modern war on land and sea we are pursuing the best policy? Is it not certain that if we were to concentrate our bombing resources on bombarding Germany the war would be immeasurably shortened? The most efficient distribution of air power to wreak the maximum destruction upon the enemy will help determine the length of the war and the duration of the subsequent peace—for air power is the best form of military power to enforce conditions which guarantee peace. That is why the Air Force must ultimately become the leading service. The air arm is *a priori* the victory-winning arm. Must we wait until a third world war before it is given its opportunity?

They Trod the Path of Duty to its Glorious End

Pte. ERIC ANDERSON, of the East Yorkshire Regiment (below), stretcher-bearer hero of the Wadi Akarit, Tunisia, fighting. On April 6, 1943, his battalion was making a dawn attack on a strongly held enemy position, when the advance company suddenly came under intense and accurate machine-gun and mortar fire, being compelled to withdraw behind the crest of a hill, and unavoidably leaving behind a few men who were wounded and pinned to the ground by the strafing.

Anderson went forward alone and, single-handed, brought back one of his comrades. Again and yet again he entered the hell that was no man's land, carrying two more of the wounded to safety. A fourth time he went out alone, still regardless of his own safety, and as he was administering first-aid preparatory to making the return journey he was hit and mortally wounded. Posthumously awarded the V.C., " his example was an inspiration to all."

VICTORIA CROSS
highest British Empire award
For Valour

F/O L. R. TRIGG, D.F.C., R.N.Z.A.F. (above) awarded the Victoria Cross for an exploit cited as " an epic of grim determination and high courage." In Aug. 1943 he undertook, as captain and pilot, a patrol in a Liberator, a type of machine new to him, and attacked a surfaced U-boat, his aircraft receiving many hits from the submarine's A.A. guns. With his plane in flames he skimmed to within 50 feet of the enemy craft and so effectively bombed her that she sank in 20 minutes. Trigg and his gallant crew are missing, believed killed.
After a British Official photo

F/Lieut. W. E. NEWTON, R.A.A.F. (above), in 52 operational sorties over New Guinea, from May 1942 to March 1943, provided " many examples of conspicuous bravery," culminating in the feat of valour which earned him the V.C. On March 17, having bombed his objective, his aircraft burst into flames. He kept calm and turned his machine away towards the shore, finally landing on the water. Two members of the crew managed to extricate themselves and were seen swimming to the land ; their V.C. captain is missing, having done all he could to keep his comrades out of enemy hands, regardless of risks he himself ran.

Acting F/Sgt. A. L. AARON, D.F.M., R.A.F.V.R. (above), posthumously awarded the V.C. for " an example of devotion to duty which has seldom been equalled and never surpassed." On the night of Aug. 12, 1943, Aaron was captain and pilot of a Stirling bomber detailed to attack Turin. Devastating bursts of fire from an enemy fighter met them as they approached to attack. Three engines were hit, the windscreen shattered, front and rear gun turrets put out of action and elevator control damaged, rendering the Stirling unstable and difficult to control.

The navigator was killed and members of the crew wounded. Aaron himself was badly hit in the face and wounded in the lung, and his right arm was rendered useless. Unable to speak, by signs he urged the bomb-aimer to take over control and set course southward in an effort to fly the crippled bomber to Sicily or North Africa. Aaron was assisted to the rear of the bomber and treated with morphia, but, mindful of his responsibility as captain, he insisted on resuming control, and was assisted into his seat and had his feet placed on the rudder bar.

But his weakness was so great that he was persuaded to desist. Though nearing complete exhaustion and in great pain he helped to get his machine home—by writing instructions with his left hand. Five hours after leaving the target the flare path at Bône airfield was sighted, and he summoned his remaining strength to direct attempts to land the damaged craft in the darkness. Nine hours after the bomb-aimer achieved the landing Aaron died.

Photos, British Official : Crown Copyright ; L.N.A., Daily Express

Editor's Postscript

ONE of the favourite arguments of those who used to admire Hitlerism and Fascism of the Mussolini brand was that under absolute rulers government was so much more competently carried on, the real interest of the population better served, the best men picked to serve it. I have known firm believers in democracy say there was "something in that argument." I never fell for it, and now it has been completely exploded, not only by revelations as to the corruption and incompetence of Fascist administrators in Italy, but by the retention in office by Hitler of the man who has been the most complete and utter failure of the whole war. In any democratic country Hermann Goering would have been sacked long ago, if he had ever been appointed Air Force Chief, which I do not think he would have been, seeing that he never showed any sign of real ability. He has done nothing that he boasted he would do. He promised Germans victory in the Battle of Britain. They were beaten. He assured them they need not fear bombs on their cities. One by one those cities are being reduced to ruins. Yet he sticks to his job. Nothing could more plainly show what poor boobs the German people are.

DID the tremendous explosion of public anger provoked by the release of Mosley and his wife come as a surprise to the Home Secretary and the Government in general? I must say it astonished me. When I read the first bald announcement that he was about to be set at liberty for reasons of health, I thought, "This will mean questions in the Commons." But the instant flaring-up of indignation all over the country and among all classes was something for which I can hardly recollect a parallel in the last fifty years. The Hoare-Laval agreement caused something of the kind, but not nearly so widespread. When the Tsar of Russia's fleet on its way to Japanese waters during the Russo-Japanese War sank British fishing-boats in the North Sea as a result of sudden panic, a howl went up which might have carried us into the conflict, if statesmen had not handled the incident wisely. But that was more a newspaper outcry than an outburst of popular rage. This Mosley episode was gingerly dealt with by the Press. The howl came from the public, and it seemed to me that all sections of the public were thinking alike in a most unusual way.

THE latest report of a cure being discovered for the "common cold" could not have been circulated at a moment more certain to ensure interest in it. Launched in the summer it would have received little notice. Just at the beginning of winter there is always a lot of *coryza*, as the doctors call it when they want to make patients believe they are suffering from something rather important! All the unfortunates who were sneezing or sniffing, coughing and blowing their noses, seized on this piece of news with gratitude and hope. My hope is that they will not expect anything to come of it. In my time there have been so many statements that diseases have at last been overcome: I ceased long ago to believe in any of them. The truth about colds is that no remedy can remove them; they have to take their course. They are a sign that something has gone wrong in our bodies and that "something" can be removed with care and perseverance. If you merely take a medicine that lessens the symptoms of your cold, you drive them elsewhere and very likely the change is for the worse.

I DO not travel about the country much these days. When I do, I can answer with a firm "Yes!" the query "Is your journey really necessary?" Wherever I go I notice disregard by farmers of the warning given by the Ministry of Agriculture against building hay-stacks or wheat-stacks close together. The customary way is to put them in a rickyard. That was also the sensible way—once. Now that high explosive and incendiary bombs are liable to fall at any moment on any part of the country it is the reverse of sensible to place ricks in a bunch, so that if one catches fire they must all be destroyed. This seems so obvious that one can hardly understand why farmers do not act upon it. But they are hard to detach from traditional methods. They are inclined, many of them, to snort with disdain at advice from the Ministry of Agriculture. They keep to their old habits, and in far too many cases one sees groups of stacks literally "asking for it." The County Agricultural Committees should take the matter in hand, using compulsion if necessary. For the loss, when ricks burn, is not the farmer's only, but the nation's

AIR COMMODORE D. C. T. BENNETT, C.B.E., D.S.O., commanding officer of the Pathfinder Force, which by laying marker flares guides R.A.F. bombers to their targets, is an expert in astro-navigation, a pioneer of flying, former Mercury "pick-a-back" aircraft pilot, and co-organizer of the Atlantic Ferry Service. Pathfinder's gilt eagle badge is seen under his "wings."

Photo, British Official: Crown Copyright

WHAT we are too much inclined to forget just now, it seems to me, is that Man is not by nature a planning animal. He does not, in most circumstances, plan for himself and he dislikes very much being planned for by other people. Each of us has individual tastes, preferences, and ideas of how we like to live; we want to arrange our lives as far as we can for ourselves. There has been an amusing illustration of this. At a Practical Planning Exhibition in Westminster there was on show a model kitchen. A practical housewife went to see it, and wrote to a newspaper to say it was all wrong. It wasn't the sort of kitchen any woman would like. Who could have designed it? Some man, she supposed, who knew nothing about kitchen labours. She was wrong. The design was concocted by six working women who live on Birmingham City Council Estates. It was set up for criticism in Birmingham, and many other women gave their views. It was modified in accordance with some of these. So it does embody the ideas of housewives. Yet other housewives don't approve of it at all. Well, there you are! Tastes differ, and opinions vary. Planning is a tricky business. We must go at it with a lot of care.

IN the congratulatory articles about the hundredth anniversary of the founding of Macmillans, the great publishing firm, there has been reference not only to the famous authors whose merit it perceived while they were young and unknown, but also to some whom it declined to publish and who became famous nevertheless. One of these was Bernard Shaw. He offered his early novels to the firm, and had them returned with thanks. I have seen it suggested that this was an error of judgement. With that I do not agree. Those novels are included in the complete edition of Shaw's works, but they are curiosities even now, and at the time they were written, more than fifty years ago, they were certainly not the sort of fiction for Macmillans to accept, and they failed at first to find acceptance from any publisher. Shaw has the good sense and generosity to recognize this himself. He has been unusually quiet of late. That is due partly, no doubt, to his being only three years off ninety. But he admits that the complexities of this war puzzle him; that is one reason why he has not written as frequently about it as he did about the conflict of 1914–18.

AT one period of the Napoleonic Wars there was a heated controversy about sailors' pigtails, which used to be the only style in the British Navy. Now there is going on a discussion about soldiers' pyjamas, which may seem a trifle compared with the tremendous issues still trembling in the scales of Fate, but it has a very real interest for millions of our fighting men. Not so much when they are actually fighting, for then there is not much chance of sleeping in beds and taking off day-clothes to put on night-wear. But when they are living through intervals between engagements, and especially when they are at home on leave, they do like to enjoy as far as they can the amenities of peacetime. Very few are able to get sleeping-suits. They are not part of the clothing issue. The War Office expects soldiers to sleep in their day-shirts. And the men have not enough coupons to buy pyjamas, even if they are procurable at a moderate price. The matter keeps on bobbing up in the House of Commons, but evidently we are short of pyjama materials and shall be for a considerable time to come.

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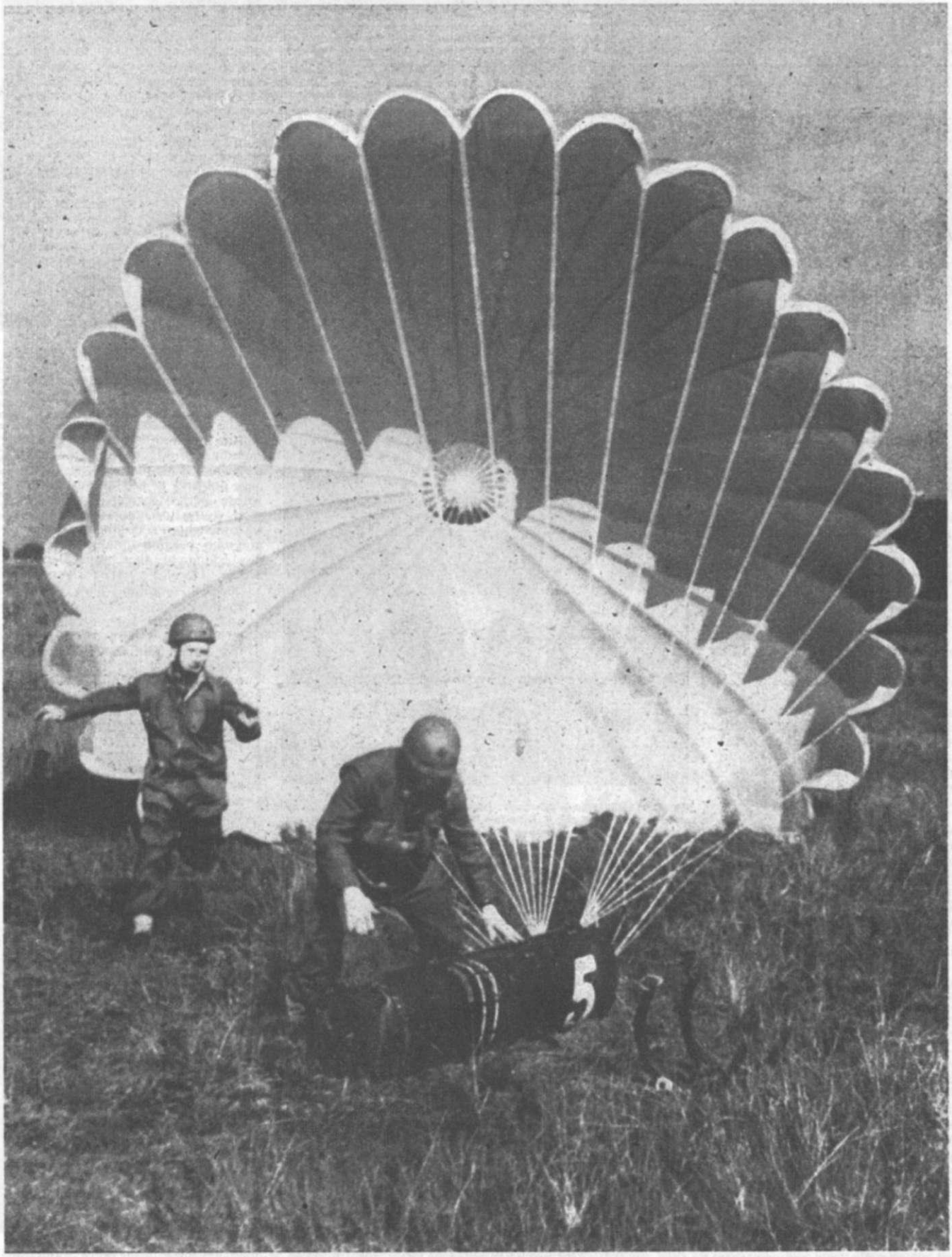
Ready for Battle They Drop from the Sky



POLISH PARACHUTE TROOPS train to take their place in the great all-out Allied offensive against the common enemy. Having safely landed from the troop-carrying plane and disengaged themselves from their descent apparatus, they rush to where the big container, borne on its own parachute, has fallen. Packed in the container are weapons, arranged for swift assembly, plus ammunition and other items essential to the previously planned operation, which, all going well, can be embarked upon within a minute or two of touching earth. *Photo, Keystone*

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